



Open Source Used In SD-AVC 3.2.0

Cisco Systems, Inc.

www.cisco.com

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco website at www.cisco.com/go/offices.

Text Part Number: 78EE117C99-209955568

This document contains licenses and notices for open source software used in this product. With respect to the free/open source software listed in this document, if you have any questions or wish to receive a copy of any source code to which you may be entitled under the applicable free/open source license(s) (such as the GNU Lesser/General Public License), please contact us at external-opensource-requests@cisco.com.

In your requests please include the following reference number 78EE117C99-209955568

Contents

- 1.1 @angular/angular 7.1.1**
 - 1.1.1 Available under license
- 1.2 @angular/material 7.2.1**
 - 1.2.1 Available under license
- 1.3 angular 1.5.9**
 - 1.3.1 Available under license
- 1.4 angular ui-grid 4.0.4**
- 1.5 angular2-moment 1.7.0**
 - 1.5.1 Available under license
- 1.6 Bootstrap 4 4.0.0**
 - 1.6.1 Available under license
- 1.7 chart.js 2.7.2**
 - 1.7.1 Available under license
- 1.8 Commons Net 3.3**
 - 1.8.1 Available under license
- 1.9 commons-codec 1.9**
 - 1.9.1 Available under license
- 1.10 commons-io 2.5**
 - 1.10.1 Available under license
- 1.11 commons-text 1.4**
 - 1.11.1 Available under license
- 1.12 core-js 2.5.7**
 - 1.12.1 Available under license
- 1.13 csv.js 1.1.1**
- 1.14 flink-connector-kafka-0.9_2.10 1.2.0**
 - 1.14.1 Available under license

- 1.15 flink-streaming-java_2.10 1.2.0**
 - 1.15.1 Available under license
- 1.16 Font Awesome 4.6.3**
 - 1.16.1 Available under license
- 1.17 ftpserver core 1.0.6**
 - 1.17.1 Available under license
- 1.18 gson 2.8.0**
 - 1.18.1 Available under license
- 1.19 jackson-annotations 2.8.0**
- 1.20 jersey-client 2.25**
 - 1.20.1 Available under license
- 1.21 jewelcli 0.8.2**
 - 1.21.1 Available under license
- 1.22 jjwt 0.7.0**
 - 1.22.1 Available under license
- 1.23 JSch 0.1.53**
 - 1.23.1 Available under license
- 1.24 jsoup 1.10.2**
 - 1.24.1 Available under license
- 1.25 libpcap 1.5.3 :December 18, 2013**
 - 1.25.1 Available under license
- 1.26 log4j 1.2.17**
 - 1.26.1 Available under license
- 1.27 material-design-icons-iconfont 3.0.3**
 - 1.27.1 Available under license
- 1.28 postgresql 9.4.1212.jre7**
 - 1.28.1 Available under license
- 1.29 PostgreSQL 9.5.9**
 - 1.29.1 Available under license
- 1.30 postgresql-client-common 42.1.4**
 - 1.30.1 Available under license
- 1.31 primeng 5.0.2**
 - 1.31.1 Available under license
- 1.32 PyGreSQL 5.0.4**
 - 1.32.1 Available under license
- 1.33 reflections 0.9.10**
 - 1.33.1 Available under license
- 1.34 rxjs 5.5.2**
 - 1.34.1 Available under license

1.35 slf4j-api 1.7.24

1.36 slf4j-log4j12 1.7.24

1.36.1 Available under license

1.37 spring-boot-starter-data-jpa 1.5.2.RELEASE

1.38 spring-boot-starter-data-rest 1.5.2 RELEASE

1.39 spring-boot-starter-jdbc 1.5.2 RELEASE

1.40 spring-boot-starter-security 1.5.2 RELEASE

1.40.1 Available under license

1.41 spring-boot-starter-web 1.5.2 RELEASE

1.41.1 Available under license

1.42 spring-web 4.3.7.RELEASE

1.42.1 Available under license

1.43 tcpdump 4.9.2 :0ubuntu0.16.04.1

1.43.1 Available under license

1.44 zone.js 0.8.16

1.44.1 Available under license

1.1 @angular/angular 7.1.1

1.1.1 Available under license :

```
import { Injectable } from '@angular/core';
```

```
import { HttpClient } from '@angular/common/http';
```

```
import { Observable } from 'rxjs/Observable';
```

```
import 'rxjs/add/operator/map';
```

```
import 'rxjs/add/operator/publishLast';
```

```
import { Contributor, ContributorGroup } from './contributors.model';
```

```
import { CONTENT_URL_PREFIX } from 'app/documents/document.service';
```

```
const contributorsPath = CONTENT_URL_PREFIX + 'contributors.json';
```

```
const knownGroups = ['Angular', 'GDE'];
```

```
@Injectable()
```

```
export class ContributorService {
```

```
  contributors: Observable<ContributorGroup[]>;
```

```
  constructor(private http: HttpClient) {
```

```
    this.contributors = this.getContributors();
```

```
  }
```

```
  private getContributors() {
```

```
    const contributors = this.http.get<{[key: string]: Contributor}>(contributorsPath)
```

```
    // Create group map
```

```

.map(contribs => {
  const contribMap = new Map<string, Contributor[]>();
  Object.keys(contribs).forEach(key => {
    const contributor = contribs[key];
    const group = contributor.group;
    const contribGroup = contribMap[group];
    if (contribGroup) {
      contribGroup.push(contributor);
    } else {
      contribMap[group] = [contributor];
    }
  });

  return contribMap;
})

// Flatten group map into sorted group array of sorted contributors
.map(cmap => {
  return Object.keys(cmap).map(key => {
    const order = knownGroups.indexOf(key);
    return {
      name: key,
      order: order === -1 ? knownGroups.length : order,
      contributors: cmap[key].sort(compareContributors)
    } as ContributorGroup;
  })
  .sort(compareGroups);
})
.publishLast();

contributors.connect();
return contributors;
}
}

function compareContributors(l: Contributor, r: Contributor) {
return l.name.toUpperCase() > r.name.toUpperCase() ? 1 : -1;
}

function compareGroups(l: ContributorGroup, r: ContributorGroup) {
return l.order === r.order ?
(l.name > r.name ? 1 : -1) :
l.order > r.order ? 1 : -1;
}
import { Component, OnInit } from '@angular/core';
import { ContributorGroup } from './contributors.model';
import { ContributorService } from './contributor.service';
import { LocationService } from 'app/shared/location.service';

```

```

@Component({
  selector: `aio-contributor-list`,
  template: `
<div class="flex-center group-buttons">
  <a *ngFor="let name of groupNames"
    [class.selected]="name == selectedGroup.name"
    class="button mat-button filter-button"
    (click)="selectGroup(name)">{{ name }}</a>
</div>
<section *ngIf="selectedGroup" class="grid-fluid">
  <div class="contributor-group">
    <aio-contributor *ngFor="let person of selectedGroup.contributors" [person]="person"></aio-contributor>
  </div>
</section>`
})
export class ContributorListComponent implements OnInit {
  private groups: ContributorGroup[];
  groupNames: string[];
  selectedGroup: ContributorGroup;

  constructor(
    private contributorService: ContributorService,
    private locationService: LocationService) { }

  ngOnInit() {
    const groupName = this.locationService.search()['group'] || '';
    // no need to unsubscribe because `contributors` completes
    this.contributorService.contributors
      .subscribe(grps => {
        this.groups = grps;
        this.groupNames = grps.map(g => g.name);
        this.selectGroup(groupName);
      });
  }

  selectGroup(name) {
    name = name.toLowerCase();
    this.selectedGroup = this.groups.find(g => g.name.toLowerCase() === name) || this.groups[0];
    this.locationService.setSearch("", { group: this.selectedGroup.name });
  }
}

import { HttpClientTestingModule, HttpTestingController } from '@angular/common/http/testing';
import { Injector } from '@angular/core';
import { TestBed } from '@angular/core/testing';

import { ContributorService } from './contributor.service';
import { ContributorGroup } from './contributors.model';

```

```

describe('ContributorService', () => {

  let injector: Injector;
  let contribService: ContributorService;
  let httpMock: HttpTestingController;

  beforeEach(() => {
    injector = TestBed.configureTestingModule({
      imports: [HttpClientTestingModule],
      providers: [
        ContributorService
      ]
    });

    contribService = injector.get(ContributorService);
    httpMock = injector.get(HttpTestingController);
  });

  afterEach(() => httpMock.verify());

  it('should make a single connection to the server', () => {
    const req = httpMock.expectOne({});
    expect(req.request.url).toBe('generated/contributors.json');
  });

  describe('#contributors', () => {

    let contribs: ContributorGroup[];
    let testData: any;

    beforeEach(() => {
      testData = getTestContribs();
      httpMock.expectOne({}).flush(testData);
      contribService.contributors.subscribe(results => contribs = results);
    });

    it('contributors observable should complete', () => {
      let completed = false;
      contribService.contributors.subscribe(null, null, () => completed = true);
      expect(true).toBe(true, 'observable completed');
    });

    it('should reshape the contributor json to expected result', () => {
      const groupNames = contribs.map(g => g.name).join(',');
      expect(groupNames).toEqual('Angular,GDE');
    });
  });
}

```

```

it('should have expected "GDE" contribs in order', () => {
  const gde = contribs[1];
  const actualAngularNames = gde.contributors.map(l => l.name).join(',');
  const expectedAngularNames = [testData.jeffcross, testData.kapunahewong].map(l => l.name).join(',');
  expect(actualAngularNames).toEqual(expectedAngularNames);
});

});

it('should do WHAT(?) if the request fails');
});

function getTestContribs() {
  return {
    kapunahewong: {
      name: 'Kapunahele Wong',
      picture: 'kapunahewong.jpg',
      website: 'https://github.com/kapunahewong',
      twitter: 'kapunahele',
      bio: 'Kapunahele is a front-end developer and contributor to angular.io',
      group: 'GDE'
    },
    misko: {
      name: 'Miko Hevery',
      picture: 'misko.jpg',
      twitter: 'mhevery',
      website: 'http://misko.hevery.com',
      bio: 'Miko Hevery is the creator of AngularJS framework.',
      group: 'Angular'
    },
    igor: {
      name: 'Igor Minar',
      picture: 'igor-minar.jpg',
      twitter: 'IgorMinar',
      website: 'https://google.com/+IgorMinar',
      bio: 'Igor is a software engineer at Angular.',
      group: 'Angular'
    },
    kara: {
      name: 'Kara Erickson',
      picture: 'kara-erickson.jpg',
      twitter: 'karaforthewin',
      website: 'https://github.com/kara',
      bio: 'Kara is a software engineer on the Angular team at Angular and a co-organizer of the Angular-SF Meetup. ',
      group: 'Angular'
    },
    jeffcross: {
      name: 'Jeff Cross',
      picture: 'jeff-cross.jpg',

```



```
twitter: 'jeffbcross',
website: 'https://twitter.com/jeffbcross',
bio: 'Jeff was one of the earliest core team members on AngularJS.',
group: 'GDE'
},
naomi: {
name: 'Naomi Black',
picture: 'naomi.jpg',
twitter: 'naomitraveller',
website: 'http://google.com/+NaomiBlack',
bio: 'Naomi is Angular\'s TPM generalist and jack-of-all-trades.',
group: 'Angular'
}
};
}
PNG
```

```
IHDRpw<ogZIDATx [B@p+j(D!
Q@(D!
h9@]4vmmjke5g\dl5{|nKW.??;w<G_/M0i%0`zLDTM@dr0xV!qKJ0{D|d?^>jg.[7q=H@7xeXS
KxR:uB Dez#89|c?,J{?n7,x@bSD{ }?z6@3b~?,:O0>} ;}W]$ TIz*~;3v>#CnhAI6 ;:?!1&b~c2
$Hv0-6OK;g$B(W.`H,-`;;o03`F,zt)O$PH7bn_`0dvD`b3xRD|#aGtD$, {h.}.$PHE1c8|"&uL1.EF!WpH$Pj8s/4yfu"
Jw@!PHB'3ZQ;0?voQ$ tm-t\b? '=8
a{Yt@!PH.'~gV#mx7YkWC<656
?iy
2y0\3}RS@!$bL:5~L!Nin*lv}q:
D!^21#ubFz2J<q'wG"7DDxNf6Gpj3&5aB@Uq1<!FXT
T}v
M6<WQO@.@:&!iN #kE(r#C
Dh[m=E[P12KB2/q]/:xM&N[[
BN]So<1T8w}<7 02} &4GkG {UR#Zz!B(Wj9hc$PRKyy3v0O&F}?R(F G&o@uw !EQHTt*2XMf4dzp
iRK]E^@M7GR0y2 |:@BX\?&;X.rG8$I($~q3H*b[1\@M'eQS]be" 6HUzcCyI($RY8(mq0u\&(a5mz
da0%S^hD@!PH~CgSR!41*1#}yTIB6]{0Z~-%gI( ^BDfz1DP8-.8;i3rpH#}q1`8EJ7)U%P}bKC+"2?|
fmo7(s<0DgycKqA _1r~+^(S{Yo,ZRSz$Ji<@$D@!PH3o>
L@&5>QPQA?vM7w
0#uYb \JY6E]n 80vZ]Z(BItEc(P%XBiud{hf" )nIL t9L[5BEj~~25ymVt% @fiu.
5}dLV{VaA=5ap:SiMd'4w!P5`Ks"uVMP%a\AF/3OC(2<7ipG :}Fa3x @:QN
9%$BpaAds0dn}xd^^%0Xp*m/^\<$BpA]GT$mUN/Zbb[i?4$P."^(().S_8Z&(W.%P;x,9T`!QF]Dc(-'Q
(
Kh0zwV;Er"Q>egi2_qAJ(gpB
<{&."dkW&
Dm"w\T
B[_wgXP:,9}'hyzxt
B ;P$QCp+%;w%
#*$%^A@!1__xp7J5OE=i}bta',"0y1H@D}t)az'T9Yekiwz<lq$BpR$($WZ*+/-X42[P tOck Y(C^an
$zdogwM]UPe3mEnXx@! OD\c^MZEK Y[pWX` }xmIlg
^gw$eDUkZV;af=QF{/@o~:,53_dza8;wvUi@! wy-]G0wIkYHd7bS?K(m1>(8d"u~0RKcQ@xxN0%
```

|mSb\$d4T}+G.;w@ <vAB5 ,lv(
I8rw"]-x
X" YPv7Bc
I|2`>HXY2)-vFez_=PHuvZ!Cz5t~vvB%tg(\$40_k59kjZYFGs7]9[4aPw
_>!c f\ZkrEHgYu[\$P\vyay['
Xm[LZ^ 5_B(n%zNI)+!Lf,
7e&}/_}3X.X\$77wB}aW="7ImPZW@b';#b
ux--QhoGq^3E@oD[.'P]BsQEpe6i5[[-pHBg5E-JXiSN\|tcG
JI,%9}I&:_0^ta+,_E@qMKW,z,<4o%otO;Hx\df-Z
6n<Ee+xxU_3.:(gsa#[K94t_
}PQ<DYo|}K@i*v|rYdgm"3^"P~L-qoI9RP]z@>F/oKTN4!JA~RSgO
o?D`qyK/9Zu@!PSw95G0eEtRPLFez
u03!rhq
%M(
L[ce5oCk:dY.4kQE-8@!PB4~r%At Y(W!\$xU);^(WFR;l4'DUA;.,kb/r'B>[\$A_NhB+X[
EM>&egEEc^N9.PTVF<y3dY.6,kQs[]#PT&3TnG,;;9ZTiq%\$P;ur?)hB?Dk_@Qu(6?&xSWJxnc)UXEB(na]v4M)
m|NL-=Z{*S;#0@!PT}|Y]o\$OP-kk6gxp O};:@Otc}?S;e/XsCk'EkvQX&WDCoC`S(v?a4q4;9U2'k("K\ A:v@-
A`R[ecKa]<+P'mNkF@Sf2?1#<+NidB)
1"ILcR)*uXx/@!PT%Z#^6OCu}A(_IkV

BHEUH%Pp
rKdXj+/\$5^h;SB|X[
h5/EIX_pL5]uveD!iN Z}0W1
2*/%C(EJ(O6&8b"lWM]6SKee@d?)jKK1([wn!cDKAM.Ctq)0B`<DXH?5FHR|\$PpH'(_Fm
\$m3br}(bYXby(=NS5TBHtE@NN56vu1Jgc=>ulfgVT~Kz85E04-1|L"\|z+7Nd,QaF\$m-+O9hKw /3H;
Lp&n5"0g*,CE%Pr'Dex!Qn4a @ _AH0bQC?E[f]/p)uW{ }y8~?rhi:#G_*PT\3o>fK!h/sfNTK=/N|2>jl7
~00xWow5xfo(jw:bnrA K; t4ucPdnR8T=#"lps2.7msY
K0.+7:ye&YdxRvncH 0.`]6`oKY6M2[C?]K
P;LX:C`Q`cQ:IXGbC
%P}bY : 74z>6YZ\q@x9]5,p
%6s&{ @X}b< ELb5?'}doPt,:O
vCF:fXbYD0?{_^ -1b-3
-f6L2333c8g8133NY{' : "T"}_C|zU~U*9v ^h;<>1E~G\$
Ao?F:1Q&Ctwd<TSu M>X^OyLCV!Q(d;0KB`?u_ ,STxFr'8D"}i >s9\$Z#1 {"d?.N\$
3V\$|q|Cp9(AIM\|DA[m9.d%04%8GzdGC-\$O]}qF)kwG#8J)dMmYZ"3,v%(%)|);J'Q(v/=F4(2
~^1`u# "[=:
:L<
Q(Q~{ 1fY*wREuZbm.l{v%Ug.g]yB<
BZi:\$ ~! aI IuV1>E=pHN
\$
HaQ2]SEDgmVv,oHRPk!OeY(` \$+/n)c;a/d:%Yk&+ #b%&(1 @
Q(h"jz;uUF#7":&.<MV3V"26Qn^i1_>j#,?ilaom&ipucm>I)6k2v`\$5bN|I[paDpw([buaq<s,"~Hf(H&Y+)+
N~IAAJUxEW9+,hi\9LjvH\$Q(i<w,4?17dr3q ^0w|F~ruE
Qtlm'?Lg/{c5U4aR|x/#Q`10:wDa;16%FpOp'&#O>9zfMm_^_PjJ\$
m@li#4+vB7lS74"bT8ly&SL=
,}~V=Ha?RPRY~6[To|wQ`>8L*]X{EH=M5a<m>J'~!S(J~<@1R`)10jbH QWkd!\$]A<vEJn-
b/nO`Dj"Z&&QDOSmfqkS36o@glzR ES"QDo~4aF-cHhdcZB?0Mz;{\$
{(^8Mt{!6:};gBquig5(Zr3&NLb+;J?I*S,?G30<< }Q2QLt QDEg;Q/(h316x^D"wzL.mgMz2DAXlfH5FITptF

Qm*"YIeJ Q]7U16qc
cRw) =SgglDa*>\$Qc!Y+)1^-57X,f]1=H(\$9&6^6Xi(Q,jFDA(UIZ'Y(IEB,=DRI(n"O[s:[?UjGQd8I#-
84SOzSSdfr5!SO#d\$57Rr\$oS4@y:RLd40+(lgt9kwc4ofr3N&!vn3;=K piadS'j3Y::UIA Q_bUI_B8ZZOTZOdYG!
Da?/c} @%DQzl:ctZ f{x}xvDa_>XH(RQ0A|+a&
TS<4~G(A)(Pb A6^[{;pGL[9NpP^1,jPoF}Td7.:q)ITyf7 L+*PDa'Qr=0IVX~ZRq> b5O<3i;C!|&M^QDqe
H5]6%|5~w+tjC(
^XM/Y.v|>q\$y/8"apix(;)D t]F&cB<[ER?aC
|CSM+DQdISa9>MDaMxkC;/.0t=QL6f(9&g(H#wZwDV!fl,YYAX=dGdpLtOz
DQ8fY#dQ.',9nC!\7^R/q}K@_%K(Hon"
lgY~2
w|oT2jiZ2\$
w<DY%a&> Tcm"?yi;QD(
eve\$
cR4_ ^=BlSBrMqu^;*bk]5j\$KW/:Lr6>oZ[lqeWl%;E#I'Q/ze|Da^IC'kLb@MU4xAWq^qER)d)%g
XfZd{!Q(3{w)pcpXY~*pIwIE2lBa K m@|"DDFP-f}
co~[(9O^Ag6<DW?*0<

mPeTgN,-);
&0bX>fr5x\$W\$
"MMc1(+b]qSP1TRzkyc
&^x-DyWL>5{6Bmhl=wJEF_.uDOX60S(H2]j5XNT_sCyOHvmKKN-zq'u
epDApkYd~A[Tf-{KP2v|_aMT
Yvxtj#+kh\$
~CvTBD,S3:0TdLt'(!0Bo0H\$.J/UCExSP<_JOe[!-*qm EceNrTza[DA(8<Qx>E~Q=!P{x'=gp
YaDWUZLI|""]:L Q
LTgEI##
Da?4C^x<xp_+~\$
_2a[mZ
"OW7f >~QD/xWcAr+E{n2iHR3A1^iB+HA Q@Iu,pw5jqz<zN{Y~'gHt/d"D
j@>YjNa#]!o(HCwD(-Z;w%O\y;!C9LI \$w
H2rdYtE"3(Iijn.2cxLhMDs=#FGIb3)Q@ }>qM(cYNSVw)Ipt9]S1[d&QS(U
DER?P~*K;!/~6<6TnMfu#E]SE Q(JhN*?eFgQGDKQ}R_?"KM\$R%FTBr^DQR>OLUq45k
K~G~|9@7KIv-i9"e{#KM% Wv/;-8C Q('hjDKG3hmD3.!EP/dV]b&{0(5*DA(Y0]U~E24tyE3Z@6lu~\$2*;R_bU
L5|l?RC Q,~xGUQ"Z
U7Uyqoo}U#39 :tx.
*O"CW Q(Pjee0]W{f
\$wE_'KoNKN Ui]JreA Sr&~QjH\$MUZ.-qD\u
7Hia T*hIDqQHcRSQERN/%i+Jib\4F5P6+O*
HSG2v>|t5dKRlwG3.dzI(G_f&vatO9,DQC"0:.6f%MNQl*@i
QD0(NWJ\$
[% {s"Jpq+T
a\$TKv%<*Dq\$
E`T(@2:u\
/U3Gh9}T\$I9d^:cPBCKDAVpJ},s[B(3zJYbJP2d_e.En*&6DxpZ8*i95CZ?\$K#F{M;jLrW_!Q-
HI78xM@v+;wsK3LPDb--
.:~9H\$JiQYy3(d+3Iv1UU2/"DD@v8; }DAX"@yC)UE4cFq3]<0tC>t<1(HAi_Cec]2p+ }gTe:S<M:~L-'Q(,~Y
Z[v3T];\$qlF(0
sXv~lb>A QSDy&%C<<yMN\~I0]E8,H)zIa_luq|`Y"l/uahu{aR/P-d: H`?&;|N9 Q(8<A

hjjb)(xDG<;SQ1.a &#Q(+,{U_)D/57R+K^+uei`2BrV=gj#^/bXr)O8t|?&nB?*F>m,3[f;_2;\$
E_/

.

}J088sL s)#{
gHD]8XM^0^!bZN<wzw)
TEU&X]-aK\$
s'e4x^UG*gwP<8g `j2QRA Q]U4^??F|Q\Kdfe/j.KVm#1H Q8n~-i/.w']V?WtLOA%eLLw&[8 H\$
K0S<x@HWC[GI0];d3
q
KGDAGFVQv
=KEeT2cr v`g@_ "Kcx<D8wP?&n2[-iFY\$FA(E,yW4t"M7oP\$
WINxQ.[a G]1SI?DQ=YE(|v1zDA7tTRUIY`[2nY!5.r&|)b%N02
32
EnC* @/r@ !C CV@ Q(qYV, .5M(#g%wW
sMp\$` TSAN QT<L\2]c*~Vk6-g#{?1X@Vp
gRIU} (Gvo2\$
o^~!XSmWT@; }Q -%jq:0+Fi<A&D(/b~#DQa_ ?I(T!&`I-"Uz)n%gMqR7,ym<
>^UQNYP'fc-N>3Ei1F'IrN \ (9oTE%SEPE8-C9V??H'ku]2tve}gA /u`UV=[nNzYk&JE/~*62WT
0Kj@6 'H h<CE~u% %Nnq,HR571w!(Oru=K7B QB]R7?<V;ot3I+t .%uNS)"KLX2} !..smd
ClgK
J)H+&y@(qALZ60Z|d|* <c/SBTek">_!\$
Dw7OLi,&r
~E
;tB2 =I n'DOD YTrfU zcTD}S" _nf+;F8q3Z>:w|-F(qav%y,%q9B]>+q} {yRQ1gdP /.rOSs'oLugI=84
dR^mbX\{x;/=Xw[\$8DVCE
!Bf~6.\OpI CR<2
2Qrp@ Q0 NiP\$X,S-{bGg
P <;x ^zaWg A Qh6Iu/YVS.rK-M ^W_|^Zeq _nAX
cD (H;i"w53,V?K1%k|qU\w&@'Nx d Q(J?N{b<=e'u|J'w|g!0SKL(I @ R
Q(_w-eP;N8D\$0jw7/DO/s@D
&w,)J)DA v!X-IoQxS>ui5aK'
R Q(gIRPkQwte nFN?oI^/(KK/9>pd
&4JX) Q(xR"UERLq7,4Ks+&wQI
6mnm
lz{ywpoWcX-rTa,]M/5 g)Dy_6D!{|
U"lr3G*1g@t2bs?l}UM/5Yc)Dx:u*^/r!uH0!RJ9sL28q"\$QH'fD#dO<5Mx\<soQm1[iX53GCE)`j6H~vHC<~0|w[n
H\$ sgIDf8/ftebv<!Tu&YAS>sQc& ZAabQM6rAth%K7n)\$M<Cy\$
IQ}q"Os>
H6l4
i*x9\oXeE!MG T}{17qlM" g)%BEgids;Q \$P@*u,'PG^d:ZQ qp
TX{Q3N^:]'NC'a1>]5
'6m1n:I(>&%
Q+86N
(.Zh&u7@ EhQ`C:5\$JGxH.!MWgYxb8p?C)S&H"%QH0:[qK(Nhu
5%KqVf6!K64jM3m9 kHLbY37D7on% A2\$vhb;w.N<^SN>HDa><XAGo9\:-Z0 L\$VZe&5v@ *~Xbr8z"
7 q Xb)YG)U2 BY8;6<<<\$QH0RmT?+gQ3M3TOAp
7vQ3
:\$!8H\$F0,oINyJz3(\$Q4U4RU!'Y=

XENLZd'\$|+h2==P2>Bq?tgzh|4Q)RDUf1cB
(Q\$8>o48#"NANpg3Mz? 4T[>ZFsX.FAhEP]l[]ZrP!DN
(,--!Klr,OOOQe)\\$
;^TRrBiWU.MDbB p/@m= BC/Rg:%RM1GUiB?~8XJ5j@l8m6mWI#B\$By*BfSFKRk,}oT=G
_KgP&">RU1Xj1}SOj>Ey(DAH.L~XZ}&uqOaJY =DVPi-9((qj*X\$C5(Si*D!B7:2(OR\"fuNXgH` ~6}X1+(-
ZKdd9jG'K2Ab)~cS<y%L?&q3-T@\$
7^s1_h0p10Z= !u
\:'XueKCP3DA,YDU>}nmmB#\$QHv*Q`j0
R46=k6Q!oWi(0x`YUD>zj ;2\z\$
S B|,J6d=RKexa?:j)zR "c2RbT
(?f!
zBs-P lmmI((tA\$g0wTZJ3hQaa:\$x,LD^7.!*N1b0x8} L*T0+Bv2ZL0 iaThkEC8% -DU4AVfIN*Uf (\$QH>Q
'lr=^sfAZx%`QF^^\J8D% Wo>6U\]]VA\$
d*rDi7\4ul\$B~>I430#F[U-s(W=O>HPxKD!x`yG6!pZ5QYzd1 XD\?ti2gs<m?cukbq\!l:1Z7k{ PPPP
0B!B!B!B!BPPPPPk-J)R?QQ \$)@*U@JI%B)l\w[HofX=s:F#>CDRT*HIT*::~~ bQ?5|O~U uP`q'
y,KWQ*x*qZ|~zVB2D<G6Ezt|Ze x<sYAu:(*~*;L@%
tCa0.rp8drE"<|>LZVnV5&)\0! M\$A&X,6
T*P(\,t:MVCAd2k4
C 7j4n~@ B@p}sml6o}p#h^G4|>g5+2,\$1(_#_RfVbaKRvUzkdnJ{g_qERAR%H(J\$R
@DP* @Q5q#zowgo9yyy98pxk0'@ ;[[j1_d(t|\$ `zB9s(.,4`%FVX~SVVs;::'!SaFf^qsimMLd"']/5/
;+z?<<,ooo%d(dFY/,
c%%%^{uMd_>>>b4~yy_Oeee~ANOOmsFvXCR)//,PP&B:lt`"jIVo
(>kq1
hITUc]II/ {m.d.@A L(uuu62
(Q150[',;oii%e
YO#uttwJ6Cf}e{{yDL@5_vl;D-
NH'l.
dHG@>0qRQ @]]]'3qq6 988qpkkkiKBiU 5s[.0-
.#YLe=0||<wY]],j#ABGFfeH_Rj#{s{ {kj"!2V#3HD{zzP*@@A&:QsbxbaH}374S=Rr.'@###P =X
a'5x ?k^o)*L
P5KNc\$apd
NYH1P(iID7-(vuB]xnjjJ\$IH(.,q (X:-'iHv:`U%aH:~::~?@-
C"T (J B@A)z)0okf8Y193{km_~5:EQ,mK1-lPkP'
(?~/W4\zky&k^4uB.17F@-aT`C65]J3Q#:}#K
26]pC~m%l#\f8-f:g(?ennK<B&l[B5J
t]5s6JoIu(u&9
6In.p^Ha-BenK>}^Q1jraI1*%)6P\UjrD,C:w8s4}\CW|4@!'4o[FV-r`b
N_xZ (iOz-`5"k
[g'
`\$DiT#T
tpQ*]k%GYQv}-BUuJT)*Aq4<-H8R""&,{;xp%\$h/fA!P
e:syG
+rttw/&PIOBJ><\$xQi" {
//2&y>DSAP .q\T;ZG@|>sJ?~BCNI-BUleaTNtg {
bCDe'}_";
7nh8V`s'9R]&T-Of{ @09 =tLAPI@A }d%Ugh Qblq}Qu mq@gFK)2an7RGF#P0s1m;]YW
(,E^q
xv

YG7L"h8zP8@%<,'9,- Z7oj
YpPQ9PanhRJ#m}X8Fj0;S&K`D6G:dZD\
"^\N0yo'?PH.f#}dlF?(;f'>_zA\$O/L[^ej,cwc XW^[*e&
((i-vSZ \$S-p)BQJXI[*FsMbB18Zk02S"7"|"ph)8HYvLqzJMxC\r,b-4Z(H{\$QP9P"NuxK3"I
@o%m4:8E/.
w[
@sA /RtGsmlsTOcK8w46`l@f@W(<B:'M1Fs3:>\$82@Ad/WP]R=]
)G&q%p-nH!"3g'wK
;ONFn`Y)eFv4vhJ2X[@oMn-`w cCvwzt{P%l@TUKDM&AiW@ }|W`roNI^<'{"n^\O}[!/f9XA6"NYKf#I]
Ti ~KQA@ { wuvw(A;@-4F6J>4~k3YJE+3)!#et?~psZi"4Y" {QUV%I|s|r84H
]4XpH=gQCAh"/v-My98JbX(QdX2; 8Wb)\<_<&@
VsD^;GV\$LPe[b?tkuq)SHSk[^hOg1Eyq-j]iQP{.gN^U);k!4@ (O<~#t
0JkR(#m)p
`YseBF@F4XK^Psai)G:6R?FR86,"MVyLl;t

)8DZ[(Z1@*h9'vy#?G1U1Oem?{-#Em7R~9ASv|rj~Kvs2+{ \$t[@.-
l~]H)@\$P&E'Ry7Ztw%FgBvo[jau4(wK2SE:>|E|3+]8icriw(
@ Co^.o!2@
cX@n_x\$?s8QP'Ka<s{\l&9)BtsmQ(#6,?fY[Y;g)LgYNT<K2/NE!"BP""kB(
Q""BQ(
EAF~ZED"8~5]QbUjI7Bfb`96G&s
"Vb`(
lLyq9Xay~?5s-b(DQnOXeQO>?XKAMjQjc?Nq C(1Kj`c\B.>(cq9xA{^
q|z,X
|[(K8C\$((sP<{1KSqi*;_m<!6NQ.
Q^Dk-6S(80ol(8n~E(dF,
Q(QBx_\$[p8wPX
UUI"
@QB IDD
P!;1mnnc7
0(\$GS)G:5coCB&U**Jx<U8~gIGd&p86 NP>,_GMk
GvW(ejfM|>dG_[L'xVxn<o` {BB*
|z)T}&d2x<|.Q\rX,p0fYDvJ'l(q(Gp^
t@ y)
zZZ|&#U#
'a8K.\L&D)!8NT)|}E"xvhlb `^cbjeJQiVF'Z-`0H]hpgMQv;k=;>oX'!Bc;(z J z "*IA (
wYs8m=sBP\$d;vi|>+% v~HV+aN6"Z4p2;e&
4
F:^A\{>N>oCRVc0<03yaur~d(rVE6;*X,-s<|Qu|f
fSz
P{6PWz]NpB"jz
h+05JCu[u
hBcl>I (cA9CVS+x/{TBX,6t(|?sPa@pdH~t:5)U"HwqCKR`Ep-k` }3t,01ww4v:6-H !e|}{ {waUp \$
TPJ")Q"@B
BB!>~}{ }3{=;333CA!b"y5D6_~eNg[Nis2.i&ZcK#@QRGIC
IK0{8s"a
dB|.\zcfj.W"+s
?d=-E-P{~j3[|rhrK\$0^m

\4ad(
w^m`iW\MqB*?){e.`8D#E@1s3#h#N_<
gBO<(3Y&'@Ise/'@1D

"!
mF[n(aQl8'(\$"h}rNst!OQcU(P(|zD91LzoP\$mjx|z>
{~?F0.5GvY!R(P(Q_u0M>D\x`8n_r!)GgCE@Ql0R|7xc!y;OZwG|97t+

sR(P(
*N4O?)?B^/Oar?%;\$Uav-q+)b!Z{J@Qp:X-"aL<x`Q)hQy4V8;Z2W_
EBhf.QQ(1>
"Q.GY3x'},{,eqMk;@Q(P(0HbD2kNO>4WR(P(14q?PyAA<V
Dr
8:Mx(P(P(1("iP&(4)RLmF
V(
~rCf
bFnqdO "uY3EO
l_z};vIQTR(P(T_? (Bh0C=zd
W:<*(@Rd@qns>){(1)-7={?W
rQ>\vy&'Ojk%H>()\P7(;e<xp!A7ml(v<D<Ap"nQ+(s;~d
)m+

r|MMB0fy;?P^E[h\$wYMwEzEQ?dNm*#g7X@w6<{L
rA]iv:Ij?y`EI
<C@P?h
Hq ?~{B*2}B7[\>Wfs`P&Zk}iM+csm8P(DwC4!aULXGk/(dZ3% 2uuA }:>1U#.);Z56'
2eq{?yH|<n=-E <z}2D)@QR*LT:~e4Uqqxu}In^/KU+Ytt4wcEtG@ b4|^s3@1)DNG^LH]L"
+GJ{e^M!TsC@1Rk_aB(FQ5QTbUE(FQ5QTbUh(
A`.oIENDB`
PNG

IHDRS(-IDATxPE?wwW!p0S&"br(R(\$i;~/N~l3f\~?37(9
Qlgm3mmmgd9uo7WOcxj:%P.
P{xZ3~fK: FpGT@z\$bnf:wwK@euBP%As(jya+)pYN
va8):EB8JsU'=Oyx6>
y\$L[2O>|baLx9qk>H)B8W~-j@ },0J"Pu 5AM?u*O@STVZ>CP[\$
(w={K6CB`\$=JDZ5#<J3X
#7,X2.8?(~~ (nQ*TML"NjI 7GD+Tlj2a#1Z1RJ!J#Fy#l{ ;jwuA6(XKx
i8_EJt[_P|P\}&vO`yDclR dr_o79c&?Uf@m!%5N+CU*4.*N%b};Y^P_a0>AT!?.
Lj^f" 4VggIa a,*Ye (bC3<BsG]*
Hx*R:
lz6>'yV1Z&)Ied}ZE TH
jKxK<2%g.
P7gBe *Hx-jwq0
,+zbE
i4aS5j7IA O)R`|zN6hYCh=}VNB@G?fpQL\$*bRP3#+F^TO6`m9

'W<l4 B5Afp-bp8yh|% @ !8u8[BDC(yBc<p~H|"C!v`#ai&21L7vo1U#-1qmEvb9cF, YK5
;j/ (3O4Osb]bE(^L*UfY*.PLZ4L% @qzTi
}o2nl+=\$PL[: @pGh& }JwqO?8ffff[IPde9vaNl3[9Qto"/<zT\] 9PP\$*+6HC8wS-t<`Aa(oZi
MOTj*f3+

Fz]^{}

^:#c

yD8{<Pk\{(,+M{r EN ,0hxPg|?9H@I+ QPifj*:,cJm"Xq9;g`|+ \$2P~s^cot`0eT@0k-(-B*X37ms t{W-ReD,(mV)!
Gg^ta!kn-D^::?Wo\

6ya6l

20lsQ/H -(eC&VuMg> l~<!eBMYPczjTij2

x|]-<|WF&4tn-FU.2Hbu61Wm K|~TjHFYPP|O(

vse/JlrmHt>[U&m\

O=(apNs

ViA`Y-\=?`b4{ mK-E-sk-9,Z

mG'xH<+g

ZY]%gR-j`Ok5V.4% 1EJ_pkBp+V6

O)1+O"-|E|/&|eXx6pE

u2l5K8({#\qe7^W

{(,6Uz'_xL

6HpGW{HnBL87n,iX-TAihALKGm~J z"xx3B_cEry0B'Ckg

?B

IQ2|Z_}|`rWsQkK0 Je6[C`+vge' (S:7\\$\^@^y1PA]vQm\(\fS.|b

0hKRVIH" {Z-~`.EyqQc-;Ij2z@)=i<

e]x

!%

4Vh(>14[[

^='y9s&aO<NU8P. qb. @ @ZuF=L69T:0+mi|5i5ECSJ8K9&^ru@m[Q\\$\Y%<ERqZ]2.m>e-

J%Ph'QJ\$Q((*E;IUgqalzhr^ Cn\|9!g~A:hAzoOh r%FaL'vi3 X@#Vm]jA*K5P j;iP\$;s!94V|1I 6B[wo!t\$&GdNLst
MfKNF3=MWQ0tic (,"UTvcFLk7H

Fc@QwG>nnwrf<q6Ey1FL4?pMbJ~

czrVt_fQ_&MDV|gw@ugM0c8@IOSP[P pEf4k& 5AQ_1=PY{fV`XX""\~"}2#@IX"(%iDs*bDP

3w7Qgl,(sY4Pnb KW9E?GL_U<KXB}g84>-(&|:Pt_<<z^3Pt}

8}G`=wXP\$2fAU@Q1RhnrirbFP at]ha\$YP2]AQi~bbp<,(cLv)NQ::7

31lO@_nc@Gj_(mpMQ8aTSIF6K\$@ab/8ob)J^IzI>nA]}NQJgiW}r

&>E:-02AGwIFX^K(3)UyU&%#sJ~fA4{*mX

_W%Z^9IyDP?WEnfsdIIW\kA'yjyX^;Md[0[1vR]&%p@ugDt]YW/!2&I35IBZyp0A^qf=-K)ju:rfPMGo mtk

ok(&Dghf +iT):\$SEIM y^e^T{Q@K

S{eAU(Voy=prw 1Py1/AYmhA\pv

Fw@"`z'H{yn6m":^l_8\&t&^/3xDrwb' +IBf=7\$/w|R

nH&yU5

-6ccjuy--BiwCHU4\|o34wZO}<F)[BYO1>@-6R<B08h2'K6#

F)I

zmhA oluxTbpz 5U<]H

%}c(@#LCr&WIQ0gk^7x.Z>j][R]KUAGHT)yW" {]7E] 55nv]rvlL<XwE3s['. &3C R@\$]v~c?j*L[PyC(Zp

'W{R**;\LehI~qEr*vYP0D2f8EchFv%Yx(E":\$, (0)5F<KYXyY^I~01v[JdPloiX~yRo(QZ

j
YP<xx_-Z|y{8koZrJ8ko0&9H6R0.OSyglIVRb[si#J+1?]9@
S-lAq%)tcALRoGTScZJYglH4qGT6-
%M=rIV#h%jJ!c;y4m&f^M(\q:'Z;z5YWN#N!_xZZP`f!2AO%+bx1RP3}MR4,+m5h(T)!RV{n[-
4H9^hmA+p[+BTSK^|aP"5^ Stt/?R1*RM\$GT)n\$ej|IqZy5*wbGYP`?*k-g%%:mGVnK)\JFsXP?~\$1} d
CEJM7K\$*k2x8CK(!Yj0V!;3G~M% 4j\7Y-
(%e){ @h2`k^F(A*/&(sy8W`<i\$!F7.AV#MvGPZjNdAPFT4F{M*6+OmY6:ybv%~xXPm\
1
[2]?\$5'.I8%Ub
0 OA@LWZ9!]{o}v>7*[^CwQ+UIE\$[O3~d!5:~_]MRI^| YPx?4T[MmgIvzhhfC@w<.0ERyQ18Zogest
C'gHLy"k]XdF"*x
NX<J]}Cd>!o70S,(|RQ|7;:7hZ&UQj
UB4 L?0ZMh90sfx/="5[m(uNP&!Z
N
yhzEe\$QO6@71cPJSj+r!:h.,1,(gXr3RNq`t?O=}He~Pa\$yD]Q*I~o#GC.l\gceJC#1O4xSC`L\$%|=>US];y7_hkE2dj!
} T
BG9<z::[a1% @/<T[@j]\$=YJ5kW_HUe2bS?|~ }% [daw|l8EEg!E@WJ
W}GwKj0 o3dl2(O;wJ9__d=wHpJ[R-jqC#fZ}9M`Th` {
pM@f(/3N7sc9spL^x/yge8N0#g`_DJp~^L"bn;k0@I05sulhI={ VM"##4ipL6l oM6
4HmYP6m_+U`YT a s8V>& }g`1m|"4@PnZ_UV i&~"F=1B&D4pxJib }Iz8`JL|Yj.#+,%Kc1g+o9r+W#-
(L1zFrI^/gN730&A2d`xyfq
?w\
DQ][7\0p{JH9oS,aVvm9qP^\`AaBx/9aNT3ddF&&A5c:\mg#\xQ+[BkWd>]XJY""^*4MC'HsBD]U)m\y&cccQbEY
b?^xmQhs+WbAsTfXZtUw9C8 z'IO6}\$(IM9Nlf7{?(
N8oYePG[?mz4?y
\$
!\$
!\$
!\$
!\$
!\$
!\$
!\$
!\$
qW>/x<9L^u
`q.Nknd:I4M|9}0O1VU(y`&ce v~90IPgW43qsQ@
\$(D!H(\$ TW#D"" P;wfwg{co>` }aMpl&h4P(t:}b!rGQa-z='Cs"Z x|>/Ut:)/sl.Qp`L&b'086)d
G6ZuZ)&p`T!||vG\Hv@ @X{A`X=JcQk7 \&` n^nzT B&h4uM &=`DppTFkZT9qNJTfdl8oQ
vYJ\$b1Y.B ek6bm6 3p8yj@xH}czlo|KJ4xC2csmsA&[|<RTq~=*0 3il&Vld9d3l8Kpp%h(n@-
[QH@"@=(A(\$^! z>ttNM93__Z766Q'(aocLY{vz\$(Ds8Dj-7cP'BTyo~ttkvznr
im!^__.{h<Ms1AQtl\$8n>Wn>|k9@i\7gaapBxjZym=??OmuEswtKi[?N,zfwF!Z9^9_TIIhe=[wn.4Ixc+f
o#045cH2eAw/k\$HYa-.+++;K\$CI}
`F +PDB%YROL:Kb[Xy]PqR.//wP4C0< UWGeK'PyM%e{ {;^BofjY`

sEQAC\xEzuzE[kqrsa]
wUwg@L81|=h#(5P
CEj>kBo5q-Zo7SQ[,+zuz@S(~"GKQ"s
yN
6#jj*ZA\B[iI \$A5e{f'vs!

RuD(S91UTDO9{a-3QFG=O~\$8'G*q9
OzT`YZ9rkhky.Z@vx+^P
!T
"g>Vn;j
#nmm4u&%W@@!~6j wUcL]#T@RwCO(=fe,25}:9wz2\$Yq.<5sk@aUY
XKeD Sg![_JD^]>`SSS_~9_S+`cC=O"\{ss@hD&(0)<giCaK/REjscU[b{D-
_X(8/5sH9ENT")O{wp8!LwN@W/SJ}R43=~}*9^__5uLV=)EXhR4h4+xx4)\$u@d#sqaa0a{6xhRC^.D#IvQQ|
\`Ay>C
{q*Z AK}s _MA
1YfGB[T&
_:oG/g(F0mm>>>~\$Dp59N3A|4)CE: 4<(,ahB_GKw4p}T,:2jVi>pV[B" aD49ILsKQB-EI" _mr/
nnnlagIAUIZOQRvAI;L
m)RRi)fe>!Lf_@j!CfLiAZ
mBP~dE,ObIq:HuM^Ha`DiY\$esH}\$m:,c#?7xUav RjU6w~&oZHI#jd"= !p\$Iq
[b\Qsu%)(\$fnwm))0d8:g&"15)\fnN5Zb&^[UIKORr:=Q2e4eFL
,Y'O&TDvL~h+ggfJ
`}D4b5)wfp1uN"IM-U32W[nC]4))fkkO_W)+oFE'KE
6Q~&EB0cx~=Y\cZcGh{IpiV+v};y!2wr%nM
ER#B~3RC
xr9SO]B)kq&(q#g\$`J.Zw^+H
J\$F<)65:]R@
:J+R
] MM -3RP+`RW5bfK\$KPe2Kd&37DK8gw8V["kw s\H#J-&VHrMaRr1<>&hU1 5e.
fh%1AhPU7c@V<FLY'[tDH<7
m[Xq? _-vZyyj4)'==yFx=szw~k/_
umR4MFIh4)
MFh4vCaIENDB`
The MIT License

Copyright (c) 2017 Google, Inc. <http://angular.io>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```

/**
 * @license Angular v0.0.0-PLACEHOLDER
 * (c) 2010-2017 Google, Inc. https://angular.io/
 * License: MIT
 */
import { Injectable } from '@angular/core';
import { HttpClient } from '@angular/common/http';

import { Observable } from 'rxjs/Observable';
import 'rxjs/add/operator/map';
import 'rxjs/add/operator/publishLast';

import { Contributor, ContributorGroup } from './contributors.model';
import { CONTENT_URL_PREFIX } from 'app/documents/document.service';

const contributorsPath = CONTENT_URL_PREFIX + 'contributors.json';
const knownGroups = ['Angular', 'GDE'];

@Injectable()
export class ContributorService {
  contributors: Observable<ContributorGroup[]>;

  constructor(private http: HttpClient) {
    this.contributors = this.getContributors();
  }

  private getContributors() {
    const contributors = this.http.get<{[key: string]: Contributor}>(contributorsPath)
    // Create group map
    .map(contribs => {
      const contribMap = new Map<string, Contributor[]>();
      Object.keys(contribs).forEach(key => {
        const contributor = contribs[key];
        const group = contributor.group;
        const contribGroup = contribMap[group];
        if (contribGroup) {
          contribGroup.push(contributor);
        } else {
          contribMap[group] = [contributor];
        }
      });
    });

    return contribMap;
  })

  // Flatten group map into sorted group array of sorted contributors
  .map(cmap => {
    return Object.keys(cmap).map(key => {

```

```

    const order = knownGroups.indexOf(key);
    return {
      name: key,
      order: order === -1 ? knownGroups.length : order,
      contributors: cmap[key].sort(compareContributors)
    } as ContributorGroup;
  })
  .sort(compareGroups);
})
.publishLast();

contributors.connect();
return contributors;
}
}

function compareContributors(l: Contributor, r: Contributor) {
return l.name.toUpperCase() > r.name.toUpperCase() ? 1 : -1;
}

function compareGroups(l: ContributorGroup, r: ContributorGroup) {
return l.order === r.order ?
  (l.name > r.name ? 1 : -1) :
  l.order > r.order ? 1 : -1;
}

```

The MIT License

Copyright (c) 2014-2017 Google, Inc. <http://angular.io>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```

export class ContributorGroup {
  name: string;

```

```

order: number;
contributors: Contributor[];
}

export class Contributor {
  group: string;
  name: string;
  picture?: string;
  website?: string;
  twitter?: string;
  bio?: string;
  isFlipped? = false;
}

import { Component, OnInit } from '@angular/core';
import { ContributorGroup } from './contributors.model';
import { ContributorService } from './contributor.service';
import { LocationService } from 'app/shared/location.service';

@Component({
  selector: `aio-contributor-list`,
  template: `
<div class="flex-center group-buttons">
  <a *ngFor="let name of groupNames"
    [class.selected]="name == selectedGroup.name"
    class="button mat-button filter-button"
    (click)="selectGroup(name)">{{ name }}</a>
</div>
<section *ngIf="selectedGroup" class="grid-fluid">
  <div class="contributor-group">
    <aio-contributor *ngFor="let person of selectedGroup.contributors" [person]="person"></aio-contributor>
  </div>
</section>`
})
export class ContributorListComponent implements OnInit {
  private groups: ContributorGroup[];
  groupNames: string[];
  selectedGroup: ContributorGroup;

  constructor(
    private contributorService: ContributorService,
    private locationService: LocationService) { }

  ngOnInit() {
    const groupName = this.locationService.search()['group'] || '';
    // no need to unsubscribe because `contributors` completes
    this.contributorService.contributors
      .subscribe(grps => {
        this.groups = grps;
      });
  }
}

```

```

    this.groupNames = grps.map(g => g.name);
    this.selectGroup(groupName);
  });
}

selectGroup(name) {
  name = name.toLowerCase();
  this.selectedGroup = this.groups.find(g => g.name.toLowerCase() === name) || this.groups[0];
  this.locationService.setSearch("", {group: this.selectedGroup.name});
}
}
import { Component, Input } from '@angular/core';

import { Contributor } from './contributors.model';
import { CONTENT_URL_PREFIX } from 'app/documents/document.service';

@Component({
  selector: 'aio-contributor',
  template: `
    <div [ngClass]="{ 'flipped': person.isFlipped }" class="contributor-card">

      <div class="card-front" (click)="flipCard(person)">
        <h3>{{ person.name }}</h3>

        <div class="contributor-image" [style.background-image]="url('+pictureBase+(person.picture ||
noPicture)+')">
          <div class="contributor-info">
            <a *ngIf="person.bio" md-button>
              View Bio
            </a>
            <a *ngIf="person.twitter" md-button class="icon"
              href="https://twitter.com/{{ person.twitter }}" target="_blank" (click)="$event.stopPropagation()">
              <span class="fa fa-twitter fa-2x"></span>
            </a>
            <a *ngIf="person.website" md-button class="icon"
              href="{{ person.website }}" target="_blank" (click)="$event.stopPropagation()">
              <span class="fa fa-link fa-2x"></span>
            </a>
          </div>
        </div>
      </div>

      <div class="card-back" *ngIf="person.isFlipped" (click)="flipCard(person)">
        <h3>{{ person.name }}</h3>
        <p class="contributor-bio">{{ person.bio }}</p>
      </div>
    </div>
  `
})

```

```
})
export class ContributorComponent {
  @Input() person: Contributor;
  noPicture = '_no-one.png';
  pictureBase = CONTENT_URL_PREFIX + 'images/bios/';

  flipCard(person) {
    person.isFlipped = !person.isFlipped;
  }
}
PNG
```

```
IHDRpw<ogZIDATx [B@p+j(D!
Q@(D!
h9@]4vmmjke5g\dl5{ |nKW.??;w<G_/M0i%0`zLDTM@dr0xV!qKJ0{D|d?^>jg.[7q=H@7xeXS
KxR:uB Dez#89|c?.J{ ?n7,x@bSD{ }?z6@3b~?,:00>};}W]$ TIz*~;3v>#CnhAI6 ;:?!1&b~c2
$hIv0-6OK;g$B(W.`H,-`;;o03`F,zt)O$PH7bn_`0dvD`b3xRD|#aGtD$, {h.}. $PHE1c8|" &uL1.EF!WpH$Pj8s/4yfu"
Jw@!PHB'3ZQ;0?voQ$ tm-t\b? '=8
a{ Yt@!PH.'~gV#mx7YkWC<656
?iy
2y0{3}RS@!$bL:5~L!Nin*lv}q:
D!^21#ubFz2J<q'wG"7DDxNf6Gpj3&5aB@Uq1<!FXT
T}v
M6<WQO@.@:&!iN #kE(r#C
Dh[m=E[P12KB2/q}:/xM&N[[
BN]So<1T8w}<7 02} &4GkG {UR#Zz!B(Wj9hc$PRKyy3v0O&F}?R(F G&o@uw !EQHTt*2XMf4dzp
iRK]E^@M7GR0y2 |: @BX\?&;X.rG8$I($~q3H*b[1\@M'eQS]be"~6HUzcCyI($RY8(mq0u/&(a5mz
da0%$^hD@!PH~CgSR!41*1#}yTIB6]{0Z~-%gI( ^BDfz1DP8-.8;i3rpH#}q1`8E,J7)U%P}bKC+"2?|
fmo7(s<0DgycKqA _1r~+^(S{ Yo,ZRSz$Ji<@$D@!PH3o>
L@&5>QPQA?vM7w
0#uYb \JY6E]n 80vZ]Z(BItEc(P%XBiud{hf" )nL t9L[5BEj~~25ymVt% @fiu.
5}dLV{ VaA=5ap:SiMd'4w!P5`Ks"uVMP%a\AF/3OC(2<7ipG :}Fa3x @:QN
9%$BpaAds0dn}xd^^%0Xp*m/^<$BpA]GT$mUN/Zbb[i?4$P."^({..S_8Z&(W.%P;x,9T`!QF]Dc(-'Q
(
Kh0zwV;Er"Q>egi2_qAJ(gpB
<{&."dkW&
Dm"w\T
B[_wgXP:,9}hyzxt
B ;P$qCp+$;:w%
#*$%^*A @!1__xp7J5OE=i}bta',"0y1H@D} }t)az'T9Yekiwz<lq$BpR$($WZ*+/-X42[P tOck Y(C^an
$tzogwM]JUPe3mEnXx@! OD\c^MZEK Y[pWX` }xmIlg
^gw$eDUkZV;af=QF{/@o~:,53_dza8;wvUi@! wy-]G0wIkYHd7bS?K(m1>(8d"u~0RKCq@xxN0%
|mSb$d4T}+G.;w@ <vAB5 ,lv(
I8rw"]-x
X" YPv7Bc
I|2^>HXY2)~vFez_=PHuvZ!Cz5t~vvB%tg($40_k59kjZYFGs7]9[4aPw
_>!c f\ZkrEHgYu[$P\vyay['
```

Xm[LZ^ 5_B(n%zNI)+!!Lf,
7e&}/_}3X.X\$77wB}aW="7lmPZW@b';#b
ux--QhoGq^3E@oD[. `P]BsQEpe6i5[[-pHBg5E-JXiSN\|tcG
JI,%9}I&:_0^ta+,_E@qMKW,z,<4o%otO;Hx\df-Z
6n<Ee+xxU_3.:(gsa#[K94t_
}PQ<DYo|}K@i*v|rYdgm"3^"P~L-qoI9RP]z@>F/oKTN4!JA~RSgO
o?D`qyK/9Zu@!PSw95G0eEtRPLFez
u03!rhq
%M(
L[ce5oCk:dY.4kQE-8@!PB4~r%At Y(W!\$xU\;^(WFR;l4'DUA;,kb/r'B>[\$A_NhB+X[
EM>&egEEc^N9.PTVF<y3dY.6,kQs[]#PT&3TnG,;;9ZTiq%\$P;ur?)hB?Dk_@Qu(6?&xSWJxnc)UXEB(na|v4M)
m|NL=-Z{*S;#0@!PT}|Y|o\$OP-kk6gxp O};:@Otc} ?S;e/XsCk'EkvQX&WDCoC`S(v?a4q4;9U2'k("|K\ A:v@-
A`R[ecKa]<+P'mNkF@Sf2?1#<+NidB)
1"ILcR)*uXx/@!PT%Z#^6OCu}A(_IkV

BHEUH%Pp
rKdXj+/\$5^h;SB|X[
h5/EIX_pL5]uveD!iN Z}0W1
2*/%C(EJ(O6&8b"lWM]6SKee@d?)jKK1([wn!cDKAM.Ctq)0B`<DXH?5FHR|PpH'(_`Fm
\$m3br}(bYXby(=NS5TBHtE@NN56vu1Jgc>=ulfgVT~Kz85E04-1|L"\|z+7Nd,QaF\$m~+O9hKw /3H;
Lp&n5"0g*,CE%Pr'Dex!Qn4a @_AH0bQC?E{f}/p)uW{ }y8~?rhi:#G_*PT\3o>fK!h/sfNTK=/N|2>jl7
~00xWow5xfo(|w:bnrA K; t4ucPdnR8T=#"lps2.7msY
K0.+7:ye&YdxRvncH 0.`]6`oKY6M2[C?|K
P;LX:C`Q`cQ:IXGbC
%P}bY : 74z>6YZ\q@x9]5,p
%6s&{ @X}b< ELb5?'}doPt,:O
vCF:fXbYD0?{_^~1b-3
-f6L2333c8g8133NY{"T}_C|zU~U*9v ^h;<>1E~G\$
Ao?F:1Q&Ctwd<TSu M>X^OyLCV!Q(d;0KB`?u_],STxFr'8D")i >s9\$Z#1{"d?.N\$
3V\$|q|Cp9(AIM\|DA{m9.d%04%8GzdGC-\$O}|qF)kwG#8J)dMmYZ"3,v%(%\);J'Q(v/=F4(2
~^1`u#"[=:
:L<
Q(Q~{ 1fY*wREuZbm.l{v%Ug.g}yB<
BZi:\$ ~! aI IuV1>E=pHN
\$
HaQ2]SEDgmVv,oHRPk!OeY(^\$+/n)c;a/d:%Yk&+ #b%&(1@
Q(h)"jz;uUF#7":.&<MV3V"26Qn^i1_>j#,?ilaom&ipucm>I)6k2v`\$5bN|I[paDpw([buaq<s,"~Hf(H&Y+)+
N~IAAJUxEW9+,hi\9LjvH\$Q(i<w,4?17dr3q ^0w|F~ruE
Qtlm'?Lg/{c5U4aR|x/#Q`10:wDa;16%FpOp'&#O>9zfMm_^_P'jJ\$
m@li#4+vB71S74"bT8ly&SL=
,)~V=Ha?RPRY~6[To|wQ`>8L*]X{EH=M5a<m>J'~!S(J~<@1R`)10jbH QWkd|A<vEJn-
b/nO`Dj"Z&QDOSmfqkS36o@glzR ES"QDo~4aF-cHhdcZB?0Mz;{\$
{(^8Mt{!6:};gBquig5(Zr3&NLb+;J?I*S,?G30<< }Q2QLt QDEg;Q/(h316x^D"wzL.mgMz2DAXlfH5FITptF
Qm*"YIeJ Q]7U16qc
cR)w =SgglDa*>\$Qc!Y+)1^~57X,f]1=H(\$9&6^6Xi(Q,jFDA(UIZ'Y(IEB,=DRI(n"O[s:[?UjGQd8I#-
84SOzSSdfr5!SO#d\$57Rr\$oS L4@y:RLd40+(lgt9kwc4ofr3N&!vn3;=K piadS'j3Y::UIA Q_bUI_B8ZZOTZOdYG!
Da?/c}@%DQzl:ctZ f{x}xvDa_>XH(RQ0A|+a&
TS<4~G(A)(Pb A6^[{;pGL[9NpP'l,jPoF}Td7.:q]ITyf7 L+*PDa'Qr=0IVX~ZRq> b5O<3i;C!|&M^QDqe

H5]6%|5~w+tjC(
^XM/Y.v|>q\$y/8"apix(;)D t]F&cB<[ER?aC
|CSM+DQdISa9>MDaMxkC;/.0t=QL6f(9&g(H#wZwDV!fl,YYAX=dGdpLtOz
DQ8fY#dQ.',9nC!\7R/q}K@_%K(Hon"
lgY~2
w|oT2jiZ2\$
w<DY%a&> Tcm"?yi;QD(
eve\$
cR4_ ^=BlSBrMqu^,*bk]5j\$KW/:Lr6>oZ[lqeW1%;E#l'Q/ze|Da^IC'kLb@MU4xAWq^qER)d)%g
XfZd{!Q(3{w)pcpXY~*pIwIE2lBa K m@|"DDFP-f}
co~{(9O^Ag6<DW?*0<

mPeTgN,-);
&0bX>fr5x\$W\$
"MMc1(+b]qSP1TRzkyc
&^x-DyWL>5{6Bmhl=wJEF_uDOX60S(H2]j5XNT_sCyOHvmKKN-zq'u
epDApkYd~A[Tf-{KP2v|_aMT
Yvxtj#+kh\$
~CvTBD,S3:0TdLt'(!0Bo0H\$.J/UCExSP<_JOe{l-*qm EceNrTza[DA(8<Qx>E~Q=!P{x'=gp
YaDWUZLl|":L Q
LTgEI##
Da?4C^x<xp_+~\$
_2a[mZ
"OW7f >~QD/xWcAr+E{n2iHR3Al^iB+HA Q@Iu,pw5jqz<zN{Y~'gHt/d"D
j@>YjNa#!o(HCwD(-Z;w%O)y;!C9LI \$w
H2rdYtE"3(I]jn.2cxLhMDs=#FGIb3)Q@ }>qM(cYNSVw)Ipt9]S1[d&QS(U
DER?P~*K;!~6 <6TnMfu#=#E]SE Q(JhN*?eFgQGDKQ}R_? \$"KM\$R%FTBr^DQR>OLUq45k
K~G~|9@7KIv-i9"e{#KM%Wv/;-8C Q('hJDKG3hmD3.!EP/dV]b&{0(5*DA(Y0]U~E24tyE3Z@6Iu~\$2*;R_bU
L5]l?RC Q,~xGUQ"Z
U7Uyqoo}U#39 :tx.
*O"CW Q(Pjee0]W{f
\$wE_'KoNKN Ui]JreA Sr&~QjH\$MUZ.-qD\u
7Hia T*hIDqQHcRSQERN/%i+Jib\4F5P6+O*
H\$G2v>|t5dKRlwG3.dzI(G_f&vatO9,DQC"0:.6f%MnQl*@i
QD0(NWJ\$
[%{s"Jpq+T
a\$TKv%<*Dq\$
E`T(@2:u\
/U3Gh9)T\$I9d^:cPBCKDAVpJ},s[B(3zJYbJP2d_e.En*&6DxpZ8*i95CZ?\$K#F{M;jLrW_!Q-
HI78xM@v+;wsK3LPDb--
.:~9H\$JliQYy3(d+3Iv1UU2/"DD@v8;}DAX"@yC)UE4cFq3]<0tC>t<1(HAi_Cec]2p+}gTe:S<M:~L-'Q(~Y
Z[v3T];\$qlF(0
sXv~lb>A QSDy&%C<<yMN~I0]E8,H)zla_luq|`Y"l/uahu{aR/P-d: H`?&;|N9 Q(8<A
hjjb)(xDG<;SQ1.a &#Q(+,{U_)D/57R+K^+uei`2BrV=gj#^/bXr)O8t|?&nB?*F>m,3[f;_2;\$
E_/

TEU&X]-aK\$
s'e4x^UG*gwP<8g `j2QRA Q]U4{??F|Q\Kdfe/j.KVm#1H Q8n~-i/.w']V?WtLOA%eLLw&[8 H\$
K0S<x@HWC[GI0];d3
q
KGDAGFVQv
=KEeT2cr v`g@_ "Kcx<D8wP?&n2[-iFY\$FA(E,yW4t"M7oP\$
WINxQ.[a G]1S!?DQ=YE(|v1zDA7tTRUIY`[2nY!5.r&|)b%N02
32
EnC*@/r@ !C CV@ Q(qYV,.5M(#g%wW
sMp\$` TSAN QT<L\2]c*~Vk6-g#{?1X@Vp
gRIU} (Gvo2\$
o^~!XSmWT@;|Q -%jq:0+Fi<A&D/(b~#DQa_ ?I(T!&`I-"Uz}n%gMqR7,ym<
>^UQNYP"fc-N>3Ei11F'IrN \((9oTE%sEPE8-C9V??H"ku]2tve}gA /u`UV=[nNzYk&JE/~*62WT
0Kj@6 'H h<CE~u% %Nnq,HR571w!(0ru=K7B QB]R7?<V;ot3I+t .%uNS}"KLX2} !..smd
ClgK
J)H+&y@(qALZ60Z|d|* <c/SBTek">_!\$
Dw7OLi,&r
~E
;tB2 =I n'DOD YTrfU zcTD}S" _nf+;F8q3Z>:w|-F(qav%y,%q9B]>+q} {yRQ1gdP /.rOSs'oLugI=84
dR^mbX\{x;=/Xw[\$8DVCE
!Bf~6.\OpI CR<2
2Qrp@ Q0 NiP\$X,S-{bGg
P <;x ^zaWg A Qh6Iu/YVS.rK-M ^W_] ^Zeq _nAX
cD (H;i"w53,V?K1%k|qU\w&@'Nx d Q(J?N{b<=e'u|J'w|g!0SKL(I @ R
Q(_w-eP;N8D\$0jw7/DO/s@D
&w,J)DA v!X-IoQxS>ui5aK'
R Q(gIRPkQwte nFN?ol^(KK/9>pd
&4JX) Q(xR"UERLq7,4Ks+&wQI
6mnm
lz{ywpoWcX-rTa,]M/5 g)Dy_6D!{|
U"lr3G*1g@t2bs?1}UM/5Yc)Dx:u*/r!uH0!RJ9sL28q"\$QH'fD#dO<5Mx\<soQm1[iX53GCE)`j6H~vHC<~0|w[n
H\$ sgIDf8/ftebv<!Tu&YAS>sQc& ZAabQM6rAth%K7n|\$M<Cy\$
IQ}q"Os>
H6l4
i*x9\oXeE!MG T}{17qlM" g\%BEgids;Q \$P@*u,'PG^d:ZQ qp
TX{Q3N^:]'NC'a1>5
'6m1n:I(>&%
Q+86N
(.Zh&u7@ EhQ`C:5\$JGxH.!MWgYxb8p?C)S&H"%QH0;[qK(Nhu
5%KqVf6!K64jM3m9 kHLbY37D7on%A2\$vhb;w.N<^SN>HDa<<XAGo9):`-Z0 L\$VZe&5v@ *~Xbr8z"
7 q Xb)YG)U2 BY8;6<<<<\$QH0RmT?+gQ3M3TOAp
7vQ3
:\$!8H\$F0,oINyJz3(\$Q4U4RU!'Y=
XENLZd'\$|]+h2==P2>Bq?tgzh|4Q)RDUf1cB
(\$Q8>o48#!"NANpg3Mz? 4T[>ZFsX.FAhEP}|[}ZrP!DN
(,--!Klr,OOOQe|\$
;^TRrBiWU.MDbB p/@m= BC/Rg:%RM1GUiB?~8XJ5j@l8m6mWI#\$By*BfSFkrk,}oT=G
_KgP&">RU1Xj1}SOj>Ey(DAH.L~XZ}&uqOaJY =DVPi-9((qJ*X\$C5(Si*D!B7:2(0R\"fuNXgH` ~6}X1+(-

ZKDd9jG'K2Ab)~cS<y%L?&q3-T@\$
7^s1_h0p10Z= !u
\:'XueKCP3DA,YDU>}nnnuB#\$QHV*Q`j0
R46=k6Q!oWi(0x`YUD>zj ;2\z\$
S B|,J6d=RKexa?:j)zR "c2RbT
(?f!
zBs-P lmmI((tA\$g0wTZJ3hQaa:\$x,LD^7.!*N1b0x8} L*T0+Bv2ZL0 iaThkEC8% -DU4AVfIN*Uf (\$QH>Q
'lr=^sfAZx%`QF^`J8D% Wo>6U[]]VA\$
d*rDi7\4ul\$B~>I430#F[U-s(W=O>HPxKD!x`yG6|pZ5QYzd1 XD\?ti2gs<m?cukbq\?l:1Z7k{ PPPP
0B!B!B!B!BPPPPPk-J)R?QQ \$)@*U@JI%B)I\w[HofX=s:F#>CDRT*HIT*::~~ bQ?5|O~U uP`q'
y,KWQ*x*qZ|~zVB2D<G6Ezt|Ze x<sYAu:(*~*;L@%
tCa0.rp8drE" </>LZVnV5&`0! M\$A&X,6
T*P(\,t:MVCAd2k4
C 7j4n~@ B@p}sml6o}p#h^G4>g5+2,\$1(_#_RfVbaKRvUzkdJ{g_qERAR%H(J\$R
@DP* @Q5q#zowgo9yyy98pxk0'@ ;[j1_d(t|\$ `zB9s|(.4 %FVX~SVVs:::;!SaFF^qsimmMLd"]5/
;+z?<<,ooo%d(dFY/
c% % ^{uMd_>>>b4~yy_Oeee~ANOOmsFvXCR)//,PP&B:lt`|jIvO
(>kq1
hITUc]II/ {m.d.@A L(uuu62
(Q150[';oiie
YO#uttwJ6Cf)e{ {yDL@5_vl;D-
NH'l.
dHG@>0qRQ @]]]'3qq6 988qpkkkiKBiU 5s[.0-
.#YLe=0||<wY]],j#ABGFfeH_Rj#{s{ {kj"!2V#3HD{zzP* @ @A&:QsbxbaH}374S=Rr.'@###P =X
a'5x ?k^o)*L
P5KNc\$apd
NYH1P(iID/7-(vuB]xnjjJ\$IH(.;q (X:-'iHv:`U%aH:~:?:@-
C"T (J B@A)z)0okf8Y193{km_~5:EQ,mK1-lPkP'
(?~/W4\zky&k^4uB.17F@-aT`C65]J3Q#:]#K
26]pC~m%l#\f8-f:g(?ennK<B&l[B5J
t]5s6JoIu(u&9
6In.p^Ha-BenK>}^Q1jraII*%)6P\UjrD,C:w8s4]|\CW|4@!'4o[FV-r`b
N_xZ (iOz-`5"k
[g'
`\$DiT#T
tpQ*k%GYQv}-BUuJT)*Aq4<-H8R""&,{;xp%\$h/fA!P
e:syG
+rttw/&PIOBJ><\$xQiI" {
//2&y>DSAP .q\T;ZG@|>sJ?~BCNI-BUleaTNtg{
bCDe'}_";
7nh8V`s'9R]&T-Of{ @09 =tlAPl@A}d%Ugh Qblq}Qu mq@gFK)2an7RGF#P0s1m;]YW
(,E^q
xv
YG7L"h8zP8@%<,'?9,- Z7oj
YpPQ9PanhRJ#m}X8Fj0;S&K`D6G:dZD\
"AN0yo'PH.f#}dIF?(;f'>_zA\$O/L[^ej,cwc XW^[*e&
((i-vSZ \$S-p)BQJXI[*FsMbBI8Zk02S"7"|"ph)8HYvLqzJMxC\r,b-4Z(H{\$QP9P"NuxK3"I
@o%m4:8E/.

w[
@sA /RtGsmIsTOck8w46`1@f@W(<B:M1Fs3:>\$82@Ad/WP]R=]
()G&q%p-nH!"3g'wK
;ONFn`Y)eFv4vhJ2X[@oMn-`w cCvwzt{P%l@TUkDM&AiW@}|W`roNI^<'{"n^O}{!/f9XA6"NYKf#I]
Ti ~KQA@ {wuvw(A;@-4F6J>4~k3YJE+3]!#et?~psZi"4Y" {QUV%I|s]r84H
]4XpH=gQCAh"/v-My98JbX(QdX2; 8Wb)\<_<&@
VsD^;GV\$LPe[b?tkuq)SHSk[^hOg1Eyq-j]iQP{.gN^U);k!4@ (O<~#t
0JkR(#m)p
`YseBF@F4XK^Psai)G:6R?FR86,"MVyLl;t

)8DZ[(Z1@*h9'vy#?G1U1Oem?{-#Em7R~9ASv|rj~Kvs2+{\$t[@.-
l~]H)@\$P&E'Ry7Ztw%FgBvo[jau4(wK2SE:>|E\3+]8icriw(
@ Co^,o!2@
cX@n_x\$?s8QP'Ka<s{|&9}BtsmQ(#6,?fY[Y;g)LgYNt<K2/NE!"BP""kB(
Q""BQ(
EAF~ZED"8~5]QbUjI7Bfb`96G&s
"Vb`(
lLyq9Xay~?5s-b(DQnOXeQO>?XKAMjQjc?Nq C(1Kj`c\B>(cq9xA{^
q|z,X
|[(K8C\$(sP<{1KSqi*:_m<!6NQ.
Q^Dk-6S(80ol(8n~E(dF,
Q(QBx_\$[p8wPX
UUI"
@QB IDD
P!;1mnn7
0(\$GS]G:5coCB&U**Jx<U8~gIGd&p86 NP>,_GMk
GvW(ejfM|>dG_[|L'xVxn<o` {BB*
|z)T}&d2x<|.Q\rX,p0fYDvJ'l(q(Gp^
t@ y)
zZZ|&#U#
'a8K.\L&D}|8NT)|}E"xvhlb`^cbjeJQiVF'Z-`0H]hpgMQv;k=;>oX"!Bc;(z J z "IA (
wYs8m=sBP\$d;vi|>+% v~HV+aN6"Z4p2;e&
4
F:^A\{>N>oCRVc0<03yaur~d(rVE6;*X,-s<|Qu|f
fSz
P{6PWz]NpB"jz
h+05JCu[u
hBcl>I (cA9CVS+x/{TBX,6t(|?sPa@pdH~t:5)U"HwqCKR`Ep-k` }3t,01ww4v:6-H !e]}{waUp \$
TPJ")Q"@B
BB!>~ } }3{=;333CA!b"y5D6_~eNg[Nis2.i&ZcK#@QRGIC
IK0{8s"a
dB|.\zcfj.W"+s
?d=-E-P{~j3[|rhrK\$0\m
|4ad(
w^m`iW\MqB*?){e.`8D#E@1s3#h#N_<
gBO<(3Y&'@Ise/'@1D

"!

mF[n(aQI8'(\${"h}rNst!OQcU(P(|zD91LzoP\$mjx\z>
{~?F0.5GvY!R(P(Q_u0M>D)\x`8n_r!)GgCE@QI0R|7xc!y;OZwG]97t+

sR(P(
*N4O?)?B^VOar?%;\$Uav-q+)b!Z{J@Qp:X-"aL<x`Q)hQy4V8;Z2W_
EBhf.QQ(1>
"Q.GY3x'},{.eqMk;@Q(P(0HbD2kNO>4WR(P(14q?PyAA<V
Dr
8:Mx(P(P(1(1"iP&(4)RLmF
V(

~rCf
bFnqdO "uY3EO
l_z};vIQTR(P(T_? (Bh0C=zd
W:<*(@Rd@qns>)((1))-7={?W
rQ>\vy&'Ojk%H>()\P7(;e<xp!A7ml(v<D<Ap"nQ+(s;~d
)m+

r|MMB0fy;?P^^E[]h\$wYMwEzEQ?dNm*#g7X@w6<{L
rA]iv:Ij'y`EI
<C@P?h
Hq ?~{B*2}B7[>Wfs`P&Zk}iM+csM8P(DwC4!aULXGk/(dZ3% 2uuA }:>1U#.;Z56'
2eq{?yH}<n=-E <z}2D)@QR*LT:?e4Uqqxu)In^KU+Ytt4wcEtG@ b4|^s3@l)DNG^LH]L"
+GJ{e^M!TsC@1Rk_aB(FQ5QTbUE(FQ5QTbUh(
A`.oIENDB`
PNG

IHDRS(-IDATxPE?wwW!p0S&"br(R(\$i;|~/N~l3f\~?37(9
Qlgm3mmmgd9uo7W0cxj:%P.
P{xZ3~fK: FpGT@z\$bnf:wwK@euBP%As(jya+]pYN
va8):EB8JsU'=Oyx6>
y\$L[2O>|baLx9qk>H)B8W~-j@ },0J"Pu 5AM?u*O@STVZ>CP[\$
(w={K6CB`\$=JDZ5#<J3X
#7,X2.8?(~~ (nQ*TML"NjI 7GD+Tlj2a#1Z1RJ!J#Fy#{;jwuA6(XKx
i8_EJt[_,P|P\}&vO`yDclR dr_o79c&?Uf@m!%5N+CU*4.*N%b};Y^P_a0>AT!?.
Lj^f" 4VggIa a,*Ye (bC3<BsG]*
Hx*R:
lz6>yV1Z&)}led}ZE TH
jKxK<2%g.
P7gBe *Hx-jwq0
,+zbE
i4aS5j7IA O)R'|zN6hYCh=}VNB@G?fpQL\$*bRP3#+F^TO6`m9
'W<l4 B5Afp-bp8yh|}%@!8u8[BDC(yBc<p~H|"C!v`#ai&21L7vo1U#-1qmEbv9cF,YK5
;j/ (3O4Osb)be(^L*UfY*.PLZ4L% @qzTi
)o2nl+= \$PL[:@pGh& }JwqO?8ffff[IPde9vaNl3[9Qto"/<zT\]'9PP\$*+6HC8wS-t<`Aa(oZi
MOTj*f3+

Fz]^{
^:#c
yD8{<Pk{((,+M{r EN ,0hxPg|?9H@I+ QPifj*:,cJm"Xq9;g `|+ \$2P~s^cot`0eT@0k-(-B*X37ms t{W-ReD,(mV)!
Gg^ta!kn-D^::?Wo\

6ya6l
20lsQ/H -(eC&VuMg> l~<!eBMYPczjTij2
x|]-<|WF&4tn-FU.2Hbu61Wm K|~TjHFYPP\O(
vse/JlrmHt>[U&m\
O=((apNs
ViA`Y-)=?`b4{ mK-E-sk-9,Z
mG'xH<+g
ZY]%gR-j`Ok5V.4%1EJ_pkBp+V6
O)1+O"-|E|/&|eXx6pE
u2l5K8({#qe7^W
{(,6Uz'_xL
6HpGW{HnBL87n,iX-TAihALKGm~J z"xx3B_cEry0B'Ckg

?B
IQ2[Z_]`rWsQkK0 Je6[C`+vge' (S:7)\$^@^y1PA]vQm\ (fS.|b
0hKRViH" {Z-~`.EyqQc-;Ij2z@)=i<
e]x
!%
4Vh(>14[[
^='y9s&aO<NU8P. qb. @ @ZuF=L69T:0+mi|5i5ECSJ8K9&^ru@m[Q\ \$Y%<ERqZ]2.m>e-
J%Ph'QJ\$Q((*E;IUgqalzhr^ Cn[9!g~A:hAzoOh r%FaL'vi3 X@#VmljA*K5P j;iP\$;s!94Va|II 6B[wo!t\$&GdNLst
MfKNF3=MWQ0tic (,"UTvcFLk7H
Fc@QwG>nnwrf<q6Ey1FL4?pMbJ~
czrVt_fQ_&MDV|gw@ugM0c8@IOSP[P pEf4k& 5AQ_1=PY{fV`XX""\~"}2#@IX"(%iiDs*bDP
3w7Qgl,(sY4Pnb KW9E?GL_U<KXB }g84>-(&|.Pt_<<\z^3Pt}
8}G`=wXP\$2fAU@Q1RhnirbfP at]ha\$YP2]AQi~bbp<,(cLv)NQ::7
31lO@_nc@Gj_,(mpMQ8aTSIF6K\$@ab/8ob)J^IzI>nA}}NQJgiW}r
&>E:-02AGwIFX^K(3)UyU&%#sJ~fA4{*mX
_W%Z^9IyDP?WEnfsdIIW\kA'yjyX^;Md[0[1vR]&%p@ugDt]YW/!2&I35IBZyp0A^qf=-K)ju:rfPMGo mtk
ok(&Dghf +iT):\$SEIM y^e^T{Q@K
S{eAU(Voy=prw 1Py1/AYmhA\pv
Fw@"`zH{yn6m":^l_8\&^/3xDrwb' +IBf=7\$/w|R
nH&yU5
-6ccjuy--BiwCHU4\o34wZO}<F)[BYO1>@-6R<B08h2'K6#
F)I
zmhA oluxTbpz 5U<]H
% }c(@#LCr&WlQ0gk^7x.Z>j][R]KUAGHT)yW" {]7E] 55nv|rvlL<Xwe3s['. &3C R@\$6]v~c?j*L[PyC(Zp
'W{R**;\LehI~qEr*vYP0D2f8EchFv% Yx(E":\$. (0)5F<KYXyY^I~01v[JdPloiX~yRo(Q2
j
YP<xx_-Zy{8koZrJ8ko0&9H6R0.OSyglIVRb[si#J+1?]9@
S-lAq%)tcALRoGTScZJYglH4qGT6-
%M=rIV#\$h%j]c;y4m&f^M(\q:'Z;z5YWN#N!_xZZP'f!2AO%+bx1RP3}MR4,+m5h(T)!RV{n[-
4H9^hmA+p[+BTSK^|aP"5^ Stt/?R1*RM\$GT)n\$ej]IqZy5*wbGYP`?k-g%%:mGVnK)\JFsXP?~\$1} d

CEJM7K\$*k2x8CK(!Yj0V!;3G~M% 4j\7Y-
(%e){ @h2`k^F(A*/&(sy8W`<i\$!F7.AV#MvGPZjNdAPFT4F{M*6+OmY6:ybv%~xXPm\
1
[2\?'\$5'.I8%Ub
0 OA@LWZ9!]{o}v>7*[^CwQ+UIE\${O3~d\5:~_}MRI^ YPx?4T[MmgIvzhhfC@w<.0ERYQ18Zogest
C'gHLy""k]XdF"*x
NX<J]}Cd>!o70S,(|RQ]7;;7hZ&UQj
UB4 L?0ZMh90sfx/= "5[m(uNP&!Z
N
yhzEe\$QO6@71cPJSj+r!:h.,1,(gXr3RNq`t?O=}He~Pa\$yD]Q*I~o#GC.I\gceJC#1O4xSC`L\$%|=>US];y7_hkE2dj!
} T
BG9<z:: [a1% @/<T[@j]\$=YJ5kW_HUe2bS?~ }% [daw|l8EEg!E@WJ
W}GwKj0 o3dl2(O;wJ9__d=wHpJ[R-jqC#fZ]9M`Th` {
pM@f(/3N7sc9spL^x/yge8N0#g`_DJP~^L"bn;k0@I05sulhI={ VM"##4ipL6l oM6
4HmYP6m_+U'YTa s8V>& }g`1m|"4@PnZ_UV i&~"F=1B&D4pxJib}Iz8`JL|Yj.#+,%Kc1g+o9r+W#-
(L1zFrI^/gN730&A2d`xyfq
?w\
DQ][7\0p{ JH9oS,aVvm9qP/\`AaBx/9aNT3ddF&&A5c:\mg#\xQ+[BkWd>]XJY""^*4MC'HsBD]U)m\y&cccQbEY
b?^xmQhs+WbAsTfXZtUw9C8 z'IO6}\$(IM9Nlf7{?(
N8oYePG[?mz4?y
\$
!\$
!\$
!\$
!\$
!\$
!\$
!\$
!\$
!\$
qw>/x<9L^u
`q,Nknd:I4M|9}0O1VU(y`&ce v~90IPgW43qsQ@
\$(D!H(\$ TW#D"" P;wfwg{co>` }aMpL&h4P(t:}b!rGQa-z='Cs"Z x|>/Ut:)/sl.Qp`L&b'086)d
G6ZuZ)&p`T!||vG\Hv@ @X{ A`X=JcQk7 \&` n^nzT B&h4uM &='DppTFkZT9qNJTfdl8oQ
vYJ\$b1Y.B ek6bm6 3p8yj@xH}czlo|KJ4xC2csmsA&[<RTq~=*0 3il&Vld9d3l8Kpp%h(n@-
[QH@"@=(A(\$^! z>ttNM93__Z766Q'(aocLY{vz\$(Ds8Dj-7cP'BTyo~ttkvznr
im!^__.{h<Ms1AQtl\$8n>Wn>|k9@i\7gaapBxjZym=?OmuEswtKi[?N,zfwF!Z9^9_TIIhe=[wn.4Ixc+f
o#045cH2eAw/k\$sHYa-.+++;K\$CI}
`F +PDB%YROL:Kb[Xy]PqR.//wP4C0< UWGeK'PyM%e{ {;^BofjY`

sEQAC\xEzuzE[kqrsa]
wUwg@L81|=h#(5P
CEj>kBo5q-Zo7SQ[,+zuz@S(~"GKQ"s
yN
6#jj*ZA\B[iI \$A5e{f'vs!

RuD(S91UTDO9{a-3QFG=O~\$8'G*q9
OzT`YZ9rkhky.Z@vx+^P
!T
"g>Vn;j
#nmm4u&%W@@!~6j wUcL|#T@RwCO(=fe,25}:9wz2\$Yq.<5sk@aUY

```

XKeD Sg![_JD^]>`SSS_~9_S+`cC=O"\{ss@hD&(0)<giCaK/REjscU[b{D-
_X(8/5sH9ENt")O{wp8!LwN@W/SJ}R43=~}*9^__5uLV=)EXhR4h4+xl4)$u@d#sqaa0a{6xhRC^.D#IvQQ|
\`Ay>C
{q*Z AK}s _MA
1YfGB[T&
_:oG/g(F0mm>>>~$Dp59N3A|4)CE: 4<(,ahB_GKw4p}T,:2jVi>pV[B" aD49ILsKQB-EI" _mr/
nnnlagIAUIZOQRvAI;L
m)RRi)fE>!Lf_@j!CfLiAZ
mBP~dE,ObIq:HuM^Ha`DiY$esH}$m:,c#?7xUav RjU6w~&oZHI#jd"= !p$Iq
[b(Qsu%)[$fnwm))0d8:g&"15)\fnN5Zb&^[UIKORr:=Q2e4eFL
,Y'O&TDvL~h+ggfJ
`D4b5)wfp1uN"IM-U32W[nC]4))fkko_W)+oFE'KE
6Q~&EB0cx~=Y\cZcGh{IpiV+v};y'!2wr%nM
ER#B~3RC
xr9SO]B)kq&(q#g$`J.Zw^+H
J$F<)65:]R@
:J+R
]MM -3RP+|^RW5bfK$KPe2Kd&37DK8gw8V["kw s\H#J-&VHrMaRr1<>&hU1 5e.
fh%1AhPU7c@V<FLY'[tDH<7
m[Xq? _-vZyyj4)'==yFx=szw~k/_
umR4MFIh4)
MFh4vCaIENDB`
{
"misko": {
  "name": "Miko Hevery",
  "picture": "misko.jpg",
  "twitter": "mhevery",
  "website": "http://misko.hevery.com",
  "bio": "Miko Hevery is the creator of AngularJS framework. He has passion for making complex things simple. He
currently works at Google, but has previously worked at Adobe, Sun Microsystems, Intel, and Xerox, where he
became an expert in building web applications in web related technologies such as Java, JavaScript, Flex and
ActionScript.",
  "group": "Angular"
},

"igor": {
  "name": "Igor Minar",
  "picture": "igor-minar.jpg",
  "twitter": "IgorMinar",
  "website": "https://google.com/+IgorMinar",
  "bio": "Igor is a software engineer at Google. He is a lead on the Angular project, practitioner of test driven
development, open source enthusiast, hacker. In his free time, Igor enjoys spending time with his wife and two kids,
doing outdoor activities (including but not limited to sports, gardening and building retaining walls).",
  "group": "Angular"
},

"naomi": {
  "name": "Naomi Black",

```



```
"picture": "naomi.jpg",
"twitter": "naomitraveller",
"website": "http://google.com/+NaomiBlack",
"bio": "Naomi is Angular's TPM generalist and jack-of-all-trades. She supports Angular's internal Google users and solves hard-to-define problems. She's been at Google since 2006, as a technical program manager on projects ranging from Accessibility to Google Transit. She fights daleks in her spare time.",
"group": "Angular"
},
```

```
"brad": {
  "name": "Brad Green",
  "picture": "brad-green.jpg",
  "twitter": "bradlygreen",
  "website": "https://plus.google.com/+BradGreen",
  "bio": "Brad Green works at Google as an engineering director. Brad manages the Google Sales Platform suite of projects as well as the AngularJS framework. Prior to Google, Brad worked on the early mobile web at AvantGo, founded and sold startups, and spent a few hard years toiling as a caterer. Brad's first job out of school was as lackey to Steve Jobs at NeXT Computer writing demo software and designing his slide presentations. Brad enjoys throwing dinner parties with his wife Heather and putting on plays with his children.",
  "group": "Angular"
},
```

```
"juleskremer": {
  "name": "Jules Kremer",
  "picture": "juleskremer.jpg",
  "twitter": "jules_kremer",
  "website": "https://plus.google.com/+JulesKremer",
  "bio": "Jules is Head of Angular Developer Relations at Google. When not working with developers, Jules is often bending into pretzel-like shapes, creating paths through thick jungle with a machete or drinking really awesome beer.",
  "group": "Angular"
},
```

```
"jelbourn": {
  "name": "Jeremy Elbourn",
  "picture": "jelbourn.jpg",
  "twitter": "jelbourn",
  "website": "https://plus.google.com/+JeremyElbourn/",
  "bio": "Angular Material Team Lead. FE Engineer @ Google specializing in AngularJS, component design, and the cleanest of code.",
  "group": "Angular"
},
```

```
"pete": {
  "name": "Pete Bacon Darwin",
  "picture": "pete.jpg",
  "twitter": "petebd",
  "website": "http://www.bacondarwin.com",
```

"bio": "AngularJS for JS Team Lead. Pete has been working on the core team since 2012 and became the team lead for the AngularJS for JS branch in November 2014. He has co-authored a book on AngularJS and regularly talks about and teaches Angular.",

"group": "Angular"

},

"stephenfluin": {

"name": "Stephen Fluin",

"picture": "stephenfluin.jpg",

"twitter": "stephenfluin",

"website": "https://plus.google.com/+stephenfluin",

"bio": "Stephen is a Developer Advocate working on the Angular team. Before joining Google, he was a Google Expert. Stephen loves to help enterprises use technology more effectively.",

"group": "Angular"

},

"robwormald": {

"name": "Rob Wormald",

"picture": "rob-wormald.jpg",

"twitter": "robwormald",

"website": "http://github.com/robwormald",

"bio": "Rob is a Developer Advocate on the Angular team at Google. He's the Angular team's resident reactive programming geek and founded the Reactive Extensions for Angular project, ngrx.",

"group": "Angular"

},

"tobias": {

"name": "Tobias Bosch",

"picture": "tobias.jpg",

"twitter": "tbosch1009",

"website": "https://plus.google.com/+TobiasBosch",

"bio": "Tobias Bosch is a software engineer at Google. He is part of the Angular core team and works on Angular.",

"group": "Angular"

},

"rado": {

"name": "Rado Kirov",

"picture": "rado.jpg",

"twitter": "radokirov",

"website": "https://plus.sandbox.google.com/+RadoslavKirov",

"bio": "Rado has been on the Angular Core team since Summer 2014. Before Angular, he worked on the AdSense serving stack, responsible for serving billions of ads daily. Being passionate about open source, he made contributions to Angular as a Google-20% project, before making the fulltime jump. He is a recovering academic; ask him about error-correcting codes from algebraic curves (or don't).",

"group": "Angular"

},

```
"alexeagle": {
  "name": "Alex Eagle",
  "picture": "alex-eagle.jpg",
  "twitter": "jakeherringbone",
  "website": "http://google.com/+alexeagle",
  "bio": "Alex works on language tooling for JavaScript and TypeScript. Previously Alex spent five years in Google's developer testing tools. He has developed systems including Google's continuous integration service, capturing build&test failures, and explaining them to developers. Before Google, Alex worked at startups including Opower, and consulted for large government IT. In his 20% time, he created the Error-Prone static analysis tool, which detects common Java programming mistakes and reports them as compile errors.",
  "group": "Angular"
},
```

```
"martinprobst": {
  "name": "Martin Probst",
  "picture": "martin-probst.jpg",
  "twitter": "martin_probst",
  "website": "http://probst.io",
  "bio": "Martin is a software engineer at Google in the AngularJS team. He holds a MSc in Software Engineering from HPI in Potsdam, Germany. Before joining the AngularJS team at Google, he worked at a database startup in the Netherlands, at EMC, at SAP, and as a freelancer. In his free time, he likes to cook and sail, not necessarily at the same time.",
  "group": "Angular"
},
```

```
"julieralph": {
  "name": "Julie Ralph",
  "picture": "julie-ralph.jpg",
  "twitter": "SomeJulie",
  "website": "https://plus.google.com/+JulieRalph",
  "bio": "Julie Ralph works as a Software Engineer in Test at Google in Seattle and is the lead developer on the Angular end-to-end testing framework Protractor.",
  "group": "Angular"
},
```

```
"alexrickabaugh": {
  "name": "Alex Rickabaugh",
  "picture": "alex-rickabaugh.jpg",
  "twitter": "synalx",
  "website": "https://plus.google.com/+AlexRickabaugh/about",
  "bio": "Core team member working to optimize the Angular platform for the next generation of applications, including mobile. Before joining the Angular team, Alex worked in the Google sales organization where he helped build the first large Angular application within Google.",
  "group": "Angular"
},
```

```
"matias": {
  "name": "Matias Niemela",
```

```
"picture": "matias.jpg",
"twitter": "yearofmoo",
"website": "http://yearofmoo.com",
"bio": "Matias Niemela is a fullstack web developer who has been programming & building websites for over 10 years, and a core team member of AngularJS for two years. In the spring of 2015 Matias joined Angular full time at Google. In his free time Matias loves to build complex things and is always up for public speaking, travelling and tweaking his current Vim setup.",
"group": "Angular"
},
```

```
"hansl": {
  "name": "Hans Larsen",
  "picture": "hansl.jpg",
  "twitter": "hanslatwork",
  "website": "http://www.codingatwork.com/",
  "bio": "Hans is a software engineer at Google on the Angular team and was previously at Slack. He works everyday to help make it easier for everyone to create beautiful, consistent web applications using Angular, using Material Design components and the CLI tool.",
  "group": "Angular"
},
```

```
"kara": {
  "name": "Kara Erickson",
  "picture": "kara-erickson.jpg",
  "twitter": "karaforthewin",
  "website": "https://github.com/kara",
  "bio": "Kara is a software engineer on the Angular team at Google and a co-organizer of the Angular-SF Meetup. Prior to Google, she helped build UI components in Angular for guest management systems at OpenTable. She enjoys snacking indiscriminately and probably other things too.",
  "group": "Angular"
},
```

```
"chuckj": {
  "name": "Chuck Jazdzewski",
  "picture": "chuckj.jpg",
  "twitter": "chuckjaz",
  "website": "http://removingalldoubt.com",
  "bio": "Chuck is a Software Engineer on the Angular team at Google. He is a programming language geek, UI framework and component library veteran, and has a passion for simplifying the task of programming. Before Google, he worked at Microsoft and Borland.",
  "group": "Angular"
},
```

```
"vikram": {
  "name": "Vikram Subramanian",
  "picture": "vikram.jpg",
  "twitter": "vikerman",
  "bio": "Vikram is a Software Engineer on the Angular team focused on Engineering Productivity. That means he
```

makes sure people on the team can move fast and not break things. Vikram enjoys doing Yoga and going on walks with his daughter.",

```
"group": "Angular"  
},
```

```
"maxsills": {  
  "name": "Max Sills",  
  "picture": "max-sills.jpg",  
  "twitter": "angularjs",  
  "website": "http://google-opensource.blogspot.com/",  
  "bio": "Max Sills is Angular's Open Source lawyer.",  
  "group": "Angular"  
},
```

```
"pawel": {  
  "name": "Pawel Kozlowski",  
  "picture": "pawel.jpg",  
  "twitter": "pkozlowski_os",  
  "bio": "Open source hacker, AngularJS book author, AngularUI lead developer. Pawel is an software-development addict who believes in free, open source software. He is a core contributor to the AngularJS framework, AngularUI, Karma-runner and several other projects. He is the co-author of the \"Mastering Web Application Development with AngularJS\" book. When not coding, Pawel can be spotted speaking at various software development conferences.",  
  "group": "Angular"  
},
```

```
"paulgschwendtner": {  
  "name": "Paul Gschwendtner",  
  "picture": "devversion.jpg",  
  "twitter": "DevVersion",  
  "website": "https://github.com/DevVersion",  
  "bio": "Paul is a 17-year-old developer living in Germany. While he attends school, Paul works as a core team member on Angular Material. Paul focuses on tooling and building components for Angular.",  
  "group": "Angular"  
},
```

```
"elad": {  
  "name": "Elad Bezalel",  
  "picture": "eladbezalel.jpg",  
  "website": "https://github.com/EladBezalel",  
  "bio": "Elad is a fullstack developer with a very strong love for design. Since 8 years old, he's been designing in Photoshop and later on fell in love with programing. This strong bond between design and computer programming gave birth to a new kind of love. And he is currently doing the combination of both, as a core member of the ngMaterial project.",  
  "group": "Angular"  
},
```

```
"marclaval": {  
  "name": "Marc Laval",
```

```

    "picture": "marclaval.jpg",
    "twitter": "marclaval",
    "website": "https://github.com/mlaval",
    "bio": "Marc is a manager at Amadeus where he leads the team in charge of developing and recommending UI frameworks for the company. He is also an open source developer and a contributor to Angular.",
    "group": "Angular"
  },

  "wardbell": {
    "name": "Ward Bell",
    "picture": "wardbell.jpg",
    "website": "https://github.com/wardbell",
    "twitter": "wardbell",
    "bio": "Ward is an all-around developer with JavaScript, node, and .net chops. He's a frequent conference speaker and podcaster, trainer, Google Developer Expert for Angular, Microsoft MVP, and PluralSight author. He is also president of IdeaBlade, an enterprise software consulting firm and the makers of breeze.js. He would like to get more sleep and spend more time in the mountains.",
    "group": "Angular"
  },

  "martinstaffa": {
    "name": "Martin Staffa",
    "picture": "martinstaffa.jpg",
    "twitter": "Narretz",
    "bio": "Martin is an English major turned web developer who loves frontend stuff. He's been part of the AngularJS team since 2014. If you can't find him roaming the Github issue queues, he's probably out with his camera somewhere.",
    "group": "Angular"
  },

  "filipesilva": {
    "name": "Filipe Silva",
    "picture": "filipe-silva.jpg",
    "twitter": "filipematossilv",
    "website": "http://github.com/filipesilva",
    "bio": "Filipe is a passion-driven developer that always strives for the most elegant solution for each problem. He is currently an author for Angular.io, a core contributor for Angular-CLI and senior front end engineer at KonnectAgain. When not busy going through PRs, you can find him scouring reddit for new dinner recipes to cook or enjoying a craft beer in Dublin.",
    "group": "Angular"
  },

  "andrewseguin": {
    "name": "Andrew Seguin",
    "picture": "andrewseguin.jpg",
    "website": "http://github.com/andrewseguin",
    "bio": "Andrew is an engineer on the Angular Material team working on bringing material components to the world. When hes not obsessing over pixels and design, he is probably off somewhere having adventures with his

```

```
wife and daughters.",
  "group": "Angular"
},

"jesusrodriguez": {
  "name": "Jess Rodrguez",
  "picture": "jesus-rodriguez.jpg",
  "twitter": "foxandxss",
  "website": "http://angular-tips.com",
  "bio": "Jesus is an open source lover, a book author and editor, and AngularUI lead developer. He is currently a
core contributor to the UI Bootstrap project.",
  "group": "Angular"
},

"crisbeto": {
  "name": "Kristiyan Kostadinov",
  "picture": "crisbeto.jpg",
  "website": "http://crisbeto.com/",
  "bio": "Kristiyan is a front-end developer, passionate open-source contributor and a core team member on Angular
Material.",
  "group": "Angular"
},

"gkalpak": {
  "name": "Georgios Kalpakas",
  "picture": "gkalpak.jpg",
  "twitter": "gkalpakas",
  "website": "https://github.com/gkalpak",
  "bio": "George is a Software Engineer with a passion for chess, robotics and automating stuff. He has a strong need
to know how things work (so if you already know, he'd love to have a talk with you). He has been a member of the
AngularJS team since 2014. When not doing geeky stuff, he is probably trying to convince his wife and kids to
apply programming principles in real life. (Or is it the other way around?)",
  "group": "Angular"
},

"mmalerba": {
  "name": "Miles Malerba",
  "picture": "mmalerba.jpg",
  "bio": "Miles is a software engineer on the Angular Material team at Google. In addition to Javascripting he enjoys
eating food and ogling cute puppies.",
  "group": "Angular"
},

"jasonaden": {
  "name": "Jason Aden",
  "picture": "jasonaden.jpg",
  "bio": "Jason is a software engineer at Google on the Angular Core team. He is enthusiastic about Angular and
application development in the modern age. In his free time Jason enjoys spending time with his wife and four
children and doing outdoor activities (hiking, fishing, snowboarding, etc.).",
```

```

"group": "Angular"
},

"jeffwhelpley": {
  "name": "Jeff Whelpley",
  "picture": "jeffwhelpley.jpg",
  "twitter": "jeffwhelpley",
  "website": "https://medium.com/@jeffwhelpley",
  "bio": "Jeff Whelpley is a Google Developer Expert and the CTO of GetHuman. He is the co-organizer of the Angular Boston meetup group, co-creator of Angular Universal, former host of AngularAir and frequent speaker at Angular events.",
  "group": "GDE"
},

"pascalprecht": {
  "name": "Pascal Precht",
  "picture": "pascalprecht.jpg",
  "website": "https://twitter.com/PascalPrecht",
  "bio": "Pascal is a software engineer, author and Google Developer Expert for the Angular team. He loves contributing to open source and is the creator of the popular angular-translate module. In his spare time hes fiddling with EDM production.",
  "group": "GDE"
},

"deborah": {
  "name": "Deborah Kurata",
  "picture": "deborah.jpg",
  "twitter": "deborahkurata",
  "website": "http://blogs.msmvps.com/deborahk/",
  "bio": "Deborah is a software developer, author, and Google Developer Expert. She is author of several Pluralsight courses including: 'Angular 2: Getting Started' and Angular Routing",
  "group": "GDE"
},

"alyssa": {
  "name": "Alyssa Nicoll",
  "picture": "mickey_mouse.jpg",
  "twitter": "alyssanicoll",
  "website": "alyssa.io",
  "bio": "I am an energetic, ber passionate GDE and Web Dev. I have some Front-End and Angular courses on Egghead.io and Code School. I love to learn new things and share them with others. I Scuba Dive and have a toothless dog named 'Gummy'. My DM is always open, come talk sometime.",
  "group": "GDE"
},

"ralph": {
  "name": "Ralph Wang",
  "picture": "ralph.jpg",

```



```
"twitter": "ralph_wang_gde",
"bio": "Ralph(Zhicheng Wang) is a senior consultant at ThoughtWorks and also a GDE. He is a technology enthusiast and he is a passionate advocate of 'Simplicity, Professionalism and Sharing'. In his eighteen years of R&D career, he worked as tester, R&D engineer, project manager, product manager and CTO. He is immersed in the excitement of the arrival of the baby.",
"group": "GDE"
},
```

```
"wassim": {
  "name": "Wassim Chegham",
  "picture": "wassim.jpg",
  "twitter": "manekinekko",
  "website": "https://medium.com/@wassimchegham",
  "bio": "Wassim (aka manekinekko on Twitter/Github) is a Developer Advocate at SFEIR, in Web technologies (Angular, Polymer, PWA, Web Components...). He is also a Developer Expert in Web technologies nominated by Google. He enjoys writing technical articles, meeting developers at events, speaking at conferences and contributing to open source projects. Wassim loves the Web Platform and works hard to move it forward.",
  "group": "GDE"
},
```

```
"chrisnoring": {
  "name": "Christoffer Noring",
  "picture": "chrisnoring.jpg",
  "twitter": "chris_noring",
  "website": "softchris.github.io",
  "bio": "Chris is a Full Stack Developer at McKinsey. A Google Developer Expert in Web Technologies and Angular. He is also a Nativescript Developer Expert. He is one of the organizers of the Angular conference ngVikings and an author of the book RxJS 5 Ultimate",
  "group": "GDE"
},
```

```
"jorgeucano": {
  "name": "Jorge Cano",
  "picture": "jorgeucano.jpg",
  "twitter": "jorgeucano",
  "website": "https://medium.com/@jorgeucano",
  "bio": "Jorge is a Full Stack Developer in ByteDefault ... Professor in several courses related to javascript , speaker, and writer of technical articles and a book Entendiendo Angular, Google Developer Expert in web technologies nominate by Google, Nativescript Developer Expert nominated by Telerik.",
  "group": "GDE"
},
```

```
"toddmotto": {
  "name": "Todd Motto",
  "picture": "toddmotto.jpg",
  "twitter": "toddmotto",
  "website": "https://ultimateangular.com",
  "bio": "Owner and trainer at Ultimate Angular. Lives in England, UK. Has a love for teaching, OSS and speaking
```

```

at conferences. Google Developer Expert for Web Technologies and Angular.",
  "group": "GDE"
},

"michaelprentice": {
  "name": "Michael Prentice",
  "picture": "michaelprentice.jpg",
  "twitter": "splaktar",
  "website": "https://www.DevIntent.com",
  "bio": "Owner and consultant at DevIntent. Active open-source contributor and leader. Passionate advocate, coach,
and consultant for LEAN and Agile teams. Google Developer Expert (GDE) in Angular. Founder and organizer for
the Google Developers Group (GDG) community on the Space Coast of Florida, USA.",
  "group": "GDE"
},

"mikebrocchi": {
  "name": "Mike Brocchi",
  "picture": "mike-brocchi.jpg",
  "twitter": "brocco",
  "bio": "Mike is a core team member of the Angular CLI team, a GDE and is also an instructor at egghead. Mike is
passionate about helping others by writing code as well as teaching.",
  "group": "Angular"
},

"manfredsteyer": {
  "name": "Manfred Steyer",
  "picture": "steyer.jpg",
  "twitter": "ManfredSteyer",
  "website": "https://www.softwarearchitekt.at",
  "bio": "Trainer and Consultant with focus on Angular. Writes for O'Reilly, the German Java Magazine and Heise.
Regularly speaks at conferences.",
  "group": "GDE"
},

"maximalsalnikov": {
  "name": "Maxim Salnikov",
  "picture": "maximalsalnikov.jpg",
  "twitter": "webmaxru",
  "website": "https://medium.com/@webmaxru",
  "bio": "Oslo-based web front-end engineer, a Google Developer Expert in Angular, Web technologies and IoT.
Active public speaker & trainer for the developer events. Leader of Norways largest meetups dedicated to web front-
end and mobile development. Founder of ngVikings and Mobile Era conferences. Progressive Web Apps advocate.",
  "group": "GDE"
},

"jeremywilken": {
  "name": "Jeremy Wilken",
  "picture": "jeremywilken.jpg",

```

```

"twitter": "gnomeontherun",
"website": "https://gnomeontherun.com",
"bio": "Based in Austin Texas, Jeremy is an application architect and homebrewer. He is a Google Developer Expert in Web Technologies and Angular, with a focus on speaking and training and author of Angular in Action and Ionic in Action.",
"group": "GDE"
},

"minko": {
"name": "Minko Gechev",
"picture": "minko.jpg",
"twitter": "mgechev",
"website": "http://blog.mgechev.com",
"bio": "Software engineer who enjoys theoretical computer science and its practical applications. Author of the books 'Switching to Angular 2' and 'Getting Started with Angular', speaker and blogger. Working on tooling for Angular and TypeScript.",
"group": "GDE"
},

"uri": {
"name": "Uri Shaked",
"picture": "urish.jpg",
"twitter": "UriShaked",
"website": "https://urish.org",
"bio": "Uri Shaked is a Google Developer Expert for Web Technologies. He regularly writes about Web and IoT related technologies in his medium blog, and speaks about these topics in conferences and meetup around the world. Among his interests are reverse engineering, hardware hacking, building 3d-printed robots and games, playing music and Salsa dancing.",
"group": "GDE"
},

"eusoj": {
"name": "Josue Gutierrez",
"picture": "josue.jpg",
"twitter": "eusoj",
"website": "http://techtam.io",
"bio": "Based in Mexico, Josue has been web developer since the last 10 years, he is part of the Google Developer Expert Program, passionate about teaching and building communities",
"group": "GDE"
},

"SanderElias": {
"name": "Sander Elias",
"picture": "sanderelias.jpg",
"twitter": "esoSanderElias",
"website": "https://sanderelias.nl",
"bio": "Sander is a versed developer with over 4 decades of practice under his belt. He is also an Google Developer Expert for web, specializing in Angular. Organizer of meetups and conferences. Helping out others wherever he can.

```

When he is not breathing code, he is fiddling around with IOT, photography, science and anything that might vaguely is gadget-like! Thinks he a master of the grill, but in reality you probably don't get a food-poisoning ;) Also, and actually the most important thing to him, he is a father of 4, and has the most patient girlfriend in the universe.",

```
"group": "GDE"  
},
```

```
"filipbech": {  
  "name": "Filip Bruun Bech-Larsen",  
  "picture": "filipbech.jpg",  
  "twitter": "filipbech",  
  "website": "http://filipbech.github.io/",  
  "bio": "Filip is a Frontend developer from Denmark. He works at IMPACT, delivering large-scale, high-performance e-commerce to international clients - most often build in Angular. He runs the local Angular usergroup - ngAarhus, and gives talks/workshops around and beyond the country of Denmark.",  
  "group": "GDE"  
},
```

```
"ocombe": {  
  "name": "Olivier Combe",  
  "picture": "ocombe.jpg",  
  "twitter": "ocombe",  
  "bio": "Olivier is a passionate front-end engineer who loves interacting with the community by doing open source projects (ocLazyLoad, ngx-translate), being a panelist at Angular-Air, giving talks or just chatting on Twitter and Slack. Hes a member of the Angular Core team and works on i18n.",  
  "group": "Angular"  
},
```

```
"cironunes": {  
  "name": "Ciro Nunes",  
  "picture": "cironunes.jpg",  
  "twitter": "cironunesdev",  
  "bio": "Ciro is the Lead Front-end Engineer of CrossEngage and Google Developer Expert in Web Technologies.",  
  "group": "GDE"  
},
```

```
"elecash": {  
  "name": "Ral Jimnez",  
  "picture": "raul.jpg",  
  "twitter": "elecash",  
  "bio": "Raul works as a CEO and Front-end Architect at Byte Default for companies around the world helping them to build high-performance web apps. In his spare time he's usually working on Videogular, involved in local meetups, speaking at conferences and contributing to open source projects.",  
  "group": "GDE"  
},
```

```
"simpulton": {  
  "name": "Lukas Ruebbelke",  
  "picture": "lukas.jpg",
```

```

"twitter": "simpulton",
"bio": "Developer. Hacker. Community backer. Author and blogger. Console logger.",
"group": "GDE"
},

"christianweyer": {
"name": "Christian Weyer",
"picture": "christianweyer.jpg",
"twitter": "ChristianWeyer",
"website": "https://www.thinktecture.com",
"bio": "Co-founder and CTO of Thinktecture AG, as well as Google GDE and Microsoft MVP. Since two decades active as an engaged and passionate speaker on several software conferences and events all over the world. Some people call him 'Mr. Cross-Platform'.",
"group": "GDE"
},

"shaireznik": {
"name": "Shai Reznik",
"picture": "shaireznik.jpg",
"twitter": "shai_reznik",
"website": "https://www.hirez.io",
"bio": "Teaches Angular at HiRez.io the most entertaining online courses on the web. An experienced developer, consultant and speaker also known for his unusual crazy Angular talks such as ng-wat, ng-show, ng-rap, etc. Shai is also the organizer of the largest JavaScript group in Israel and a professional Improv performer.",
"group": "GDE"
},

"danwahlin": {
"name": "Dan Wahlin",
"picture": "danwahlin.jpg",
"twitter": "DanWahlin",
"website": "https://codewithdan.com",
"bio": "Dan Wahlin founded Wahlin Consulting which provides consulting and onsite/online training services on Web technologies such as JavaScript, Angular, TypeScript, Node.js, C#, ASP.NET Core, Web API, and Docker. Hes also published many developer courses on Pluralsight.com and Udemy.com. Dan is a Google GDE, Docker Captain, and Microsoft MVP and Regional Director and speaks at conferences and user groups around the world. Dan has written several books on Web technologies, hundreds of technical articles and blog posts (https://blog.codewithdan.com) and runs the 'Code with Dan Web Weekly Newsletter' - a great way to stay up on the latest technologies. Follow Dan on Twitter @DanWahlin.",
"group": "GDE"
},

"joeames": {
"name": "Joe Eames",
"picture": "joeames.jpg",
"twitter": "josepheames",
"website": "https://joeames.me",
"bio": "Joe Eames is a developer and educator. He publishes course on Angular and JavaScript on Pluralsight.com.

```

He is an organizer of ng-conf, a Google Developer Expert in Angular, gives lots of talks & workshops, and loves all things web.",

```
"group": "GDE"  
},
```

```
"willmendesneto": {  
  "name": "Wilson Mendes",  
  "picture": "willmendesneto.jpg",  
  "twitter": "willmendesneto",  
  "website": "https://willmendesneto.github.io",  
  "bio": "GDE (Google Developer Expert) Angular and Web Technologies, GDG Salvador organizer, passionate about technology and active in communities with a focus on web development, including Angular, JavaScript, HTML5, CSS3, Workflow, web performance, security and Internet of things. Participates in events organization, speaker at conferences in Brazil and other countries and contributes to several open source projects.",  
  "group": "GDE"  
},
```

```
"jecelynyeen": {  
  "name": "Jecelyn Yeen",  
  "picture": "jecelynyeen.jpg",  
  "twitter": "jecelynyeen",  
  "website": "https://developers.google.com/experts/people/jecelyn-yeen",  
  "bio": "GDE (Google Developer Expert) Angular and Web Technologies, Women Who Code KL Director, Jecelyn specializes in professional application development with technologies, including Angular, HTML5, Typescript, JavaScript, CSS, C#, NodeJs, Cloud and ASP.NET.",  
  "group": "GDE"  
},
```

```
"vincirufus": {  
  "name": "Vinci Rufus",  
  "picture": "vincirufus.jpg",  
  "twitter": "areai51",  
  "website": "https://developers.google.com/experts/people/vinci-rufus",  
  "bio": "Director of Experience Technology at SapienRazorfish. Consults various brands on their frontend and mobile web architecture. A speaker at various forums and mentor at Launchpad Accelerator and ngGirls India. Spends free time playing with Angular, Preact, web-components ",  
  "group": "GDE"  
},
```

```
"thierrychatel": {  
  "name": "Thierry Chatel",  
  "picture": "thierrychatel.jpg",  
  "twitter": "ThierryChatel",  
  "website": "http://www.methotic.com",  
  "bio": "Thierry is a senior consultant and trainer, specialized on Angular, and a Google Developer Expert.",  
  "group": "GDE"  
},
```

```

"gerardsans": {
  "name": "Gerard Sans",
  "picture": "gerardsans.jpg",
  "twitter": "gerardsans",
  "website": "https://medium.com/@gerard.sans",
  "bio": "Gerard is very excited about the future of the Web and JavaScript. Always happy Computer Science Engineer and humble Google Developer Expert. He loves to share his learnings by giving talks, trainings and writing about cool technologies. He loves running AngularZone and GraphQL London, mentoring students and giving back to the community.",
  "group": "GDE"
},

"amcdnl": {
  "name": "Austin McDaniel",
  "picture": "amcdnl.jpeg",
  "twitter": "amcdnl",
  "website": "https://amcdnl.com",
  "bio": "Austin is an software architect with a passion for JavaScript and Angular. Austin loves to share his experiences with other like-minded developers by giving talks, blogging, podcasting and open-sourcing.",
  "group": "Angular"
},

"nirkaufman": {
  "name": "Nir Kaufman",
  "picture": "nirkaufman.jpg",
  "twitter": "nirkaufman",
  "website": "http://ngnir.life/",
  "bio": "Nir is a Principal Frontend Consultant & Head of the Angular department at 500Tech, Google Developer Expert and community leader. He organizes the largest Angular meetup group in Israel (Angular-IL), talks and teaches about front-end technologies around the world. He is also the author of two books about Angular and the founder of the 'Frontend Band'.",
  "group": "GDE"
}
}
}
@title
@description
The MIT License

```

Copyright (c) 2014-2017 Google, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in

all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
export class ContributorGroup {
  name: string;
  order: number;
  contributors: Contributor[];
}

export class Contributor {
  group: string;
  name: string;
  picture?: string;
  website?: string;
  twitter?: string;
  bio?: string;
  isFlipped ? = false;
}

import { HttpClientTestingModule, HttpTestingController } from '@angular/common/http/testing';
import { Injector } from '@angular/core';
import { TestBed } from '@angular/core/testing';

import { ContributorService } from './contributor.service';
import { ContributorGroup } from './contributors.model';

describe('ContributorService', () => {

  let injector: Injector;
  let contribService: ContributorService;
  let httpMock: HttpTestingController;

  beforeEach(() => {
    injector = TestBed.configureTestingModule({
      imports: [HttpClientTestingModule],
      providers: [
        ContributorService
      ]
    });
  });

  contribService = injector.get<ContributorService>(ContributorService);
  httpMock = injector.get(HttpTestingController);
});
```



```

afterEach(() => httpMock.verify());

it('should make a single connection to the server', () => {
  const req = httpMock.expectOne({});
  expect(req.request.url).toBe('generated/contributors.json');
});

describe('#contributors', () => {

  let contribs: ContributorGroup[];
  let testData: any;

  beforeEach(() => {
    testData = getTestContribs();
    httpMock.expectOne({}).flush(testData);
    contribService.contributors.subscribe(results => contribs = results);
  });

  it('contributors observable should complete', () => {
    let completed = false;
    contribService.contributors.subscribe(undefined, undefined, () => completed = true);
    expect(completed).toBe(true, 'observable completed');
  });

  it('should reshape the contributor json to expected result', () => {
    const groupNames = contribs.map(g => g.name).join(',');
    expect(groupNames).toEqual('Angular,GDE');
  });

  it('should have expected "GDE" contribs in order', () => {
    const gde = contribs[1];
    const actualAngularNames = gde.contributors.map(l => l.name).join(',');
    const expectedAngularNames = [testData.jeffcross, testData.kapunahewong].map(l => l.name).join(',');
    expect(actualAngularNames).toEqual(expectedAngularNames);
  });
});

it('should do WHAT(?) if the request fails');
});

function getTestContribs() {
  return {
    kapunahewong: {
      name: 'Kapunahele Wong',
      picture: 'kapunahewong.jpg',
      website: 'https://github.com/kapunahewong',
      twitter: 'kapunahele',
    }
  }
}

```

```

    bio: 'Kapunahele is a front-end developer and contributor to angular.io',
    group: 'GDE'
  },
  misko: {
    name: 'Miko Hevery',
    picture: 'misko.jpg',
    twitter: 'mhevery',
    website: 'http://misko.hevery.com',
    bio: 'Miko Hevery is the creator of AngularJS framework.',
    group: 'Angular'
  },
  igor: {
    name: 'Igor Minar',
    picture: 'igor-minar.jpg',
    twitter: 'IgorMinar',
    website: 'https://google.com/+IgorMinar',
    bio: 'Igor is a software engineer at Angular.',
    group: 'Angular'
  },
  kara: {
    name: 'Kara Erickson',
    picture: 'kara-erickson.jpg',
    twitter: 'karaforthewin',
    website: 'https://github.com/kara',
    bio: 'Kara is a software engineer on the Angular team at Angular and a co-organizer of the Angular-SF Meetup. ',
    group: 'Angular'
  },
  jeffcross: {
    name: 'Jeff Cross',
    picture: 'jeff-cross.jpg',
    twitter: 'jeffbcross',
    website: 'https://twitter.com/jeffbcross',
    bio: 'Jeff was one of the earliest core team members on AngularJS.',
    group: 'GDE'
  },
  naomi: {
    name: 'Naomi Black',
    picture: 'naomi.jpg',
    twitter: 'naomitraveller',
    website: 'http://google.com/+NaomiBlack',
    bio: 'Naomi is Angular\'s TPM generalist and jack-of-all-trades.',
    group: 'Angular'
  }
};
}
import { NgModule, Type } from '@angular/core';
import { CommonModule } from '@angular/common';
import { ContributorListComponent } from './contributor-list.component';

```

```

import { ContributorService } from './contributor.service';
import { ContributorComponent } from './contributor.component';
import { WithCustomElementComponent } from './element-registry';

@NgModule({
  imports: [ CommonModule ],
  declarations: [ ContributorListComponent, ContributorComponent ],
  entryComponents: [ ContributorListComponent ],
  providers: [ ContributorService ]
})
export class ContributorListModule implements WithCustomElementComponent {
  customElementComponent: Type<any> = ContributorListComponent;
}
import { Component, OnInit } from '@angular/core';
import { ContributorGroup } from './contributors.model';
import { ContributorService } from './contributor.service';
import { LocationService } from 'app/shared/location.service';

@Component({
  selector: `aio-contributor-list`,
  template: `
<div class="flex-center group-buttons">
  <a *ngFor="let name of groupNames"
    [class.selected]="name == selectedGroup.name"
    class="button mat-button filter-button"
    (click)="selectGroup(name)">{ {name} }</a>
</div>
<section *ngIf="selectedGroup" class="grid-fluid">
  <div class="contributor-group">
    <aio-contributor *ngFor="let person of selectedGroup.contributors" [person]="person"></aio-contributor>
  </div>
</section>`
})
export class ContributorListComponent implements OnInit {
  private groups: ContributorGroup[];
  groupNames: string[];
  selectedGroup: ContributorGroup;

  constructor(
    private contributorService: ContributorService,
    private locationService: LocationService) { }

  ngOnInit() {
    const groupName = this.locationService.search()['group'] || '';
    // no need to unsubscribe because `contributors` completes
    this.contributorService.contributors
      .subscribe(grps => {
        this.groups = grps;
      });
  }
}

```

```

        this.groupNames = grps.map(g => g.name);
        this.selectGroup(groupName);
    });
}

selectGroup(name: string) {
    name = name.toLowerCase();
    this.selectedGroup = this.groups.find(g => g.name.toLowerCase() === name) || this.groups[0];
    this.locationService.setSearch("", {group: this.selectedGroup.name});
}
}
import { Injectable } from '@angular/core';
import { HttpClient } from '@angular/common/http';

import { ConnectableObservable, Observable } from 'rxjs';
import { map, publishLast } from 'rxjs/operators';

import { Contributor, ContributorGroup } from './contributors.model';

// TODO(andrewjs): Look into changing this so that we don't import the service just to get the const
import { CONTENT_URL_PREFIX } from 'app/documents/document.service';

const contributorsPath = CONTENT_URL_PREFIX + 'contributors.json';
const knownGroups = ['Angular', 'GDE'];

@Injectable()
export class ContributorService {
    contributors: Observable<ContributorGroup[]>;

    constructor(private http: HttpClient) {
        this.contributors = this.getContributors();
    }

    private getContributors() {
        const contributors = this.http.get<{[key: string]: Contributor}>(contributorsPath).pipe(
            // Create group map
            map(contribs => {
                const contribMap: { [name: string]: Contributor[] } = {};
                Object.keys(contribs).forEach(key => {
                    const contributor = contribs[key];
                    const group = contributor.group;
                    const contribGroup = contribMap[group];
                    if (contribGroup) {
                        contribGroup.push(contributor);
                    } else {
                        contribMap[group] = [contributor];
                    }
                });
            });
    }
}

```

```

    return contribMap;
  }},

  // Flatten group map into sorted group array of sorted contributors
  map(cmap => {
    return Object.keys(cmap).map(key => {
      const order = knownGroups.indexOf(key);
      return {
        name: key,
        order: order === -1 ? knownGroups.length : order,
        contributors: cmap[key].sort(compareContributors)
      } as ContributorGroup;
    })
    .sort(compareGroups);
  }},

  publishLast(),
);

(contributors as ConnectableObservable<ContributorGroup[]>).connect();
return contributors;
}
}

function compareContributors(l: Contributor, r: Contributor) {
return l.name.toUpperCase() > r.name.toUpperCase() ? 1 : -1;
}

function compareGroups(l: ContributorGroup, r: ContributorGroup) {
return l.order === r.order ?
  (l.name > r.name ? 1 : -1) :
  l.order > r.order ? 1 : -1;
}

import { ReflectiveInjector } from '@angular/core';

import { of } from 'rxjs';

import { ContributorGroup } from './contributors.model';
import { ContributorListComponent } from './contributor-list.component';
import { ContributorService } from './contributor.service';
import { LocationService } from 'app/shared/location.service';

// Testing the component class behaviors, independent of its template
// Let e2e tests verify how it displays.
describe('ContributorListComponent', () => {

  let component: ContributorListComponent;

```

```

let injector: ReflectiveInjector;
let contributorService: TestContributorService;
let locationService: TestLocationService;
let contributorGroups: ContributorGroup[];

beforeEach(() => {
  injector = ReflectiveInjector.resolveAndCreate([
    ContributorListComponent,
    {provide: ContributorService, useClass: TestContributorService },
    {provide: LocationService, useClass: TestLocationService }
  ]);

  locationService = injector.get(LocationService);
  contributorService = injector.get(ContributorService);
  contributorGroups = contributorService.testContributors;
});

it('should select the first group when no query string', () => {
  component = getComponent();
  expect(component.selectedGroup).toBe(contributorGroups[0]);
});

it('should select the first group when query string w/o "group" property', () => {
  locationService.searchResult = { foo: 'GDE' };
  component = getComponent();
  expect(component.selectedGroup).toBe(contributorGroups[0]);
});

it('should select the first group when query group not found', () => {
  locationService.searchResult = { group: 'foo' };
  component = getComponent();
  expect(component.selectedGroup).toBe(contributorGroups[0]);
});

it('should select the GDE group when query group is "GDE"', () => {
  locationService.searchResult = { group: 'GDE' };
  component = getComponent();
  expect(component.selectedGroup).toBe(contributorGroups[1]);
});

it('should select the GDE group when query group is "gde" (case insensitive)', () => {
  locationService.searchResult = { group: 'gde' };
  component = getComponent();
  expect(component.selectedGroup).toBe(contributorGroups[1]);
});

it('should set the query to the "GDE" group when user selects "GDE"', () => {
  component = getComponent();

```

```

    component.selectGroup('GDE');
    expect(locationService.searchResult['group']).toBe('GDE');
  });

it('should set the query to the first group when user selects unknown name', () => {
  component = getComponent();
  component.selectGroup('GDE'); // a legit group that isn't the first

  component.selectGroup('foo'); // not a legit group name
  expect(locationService.searchResult['group']).toBe('Angular');
});

//// Test Helpers ////
function getComponent(): ContributorListComponent {
  const comp = injector.get(ContributorListComponent);
  comp.ngOnInit();
  return comp;
}

interface SearchResult { [index: string]: string; };

class TestLocationService {
  searchResult: SearchResult = {};
  search = jasmine.createSpy('search').and.callFake(() => this.searchResult);
  setSearch = jasmine.createSpy('setSearch')
    .and.callFake((label: string, result: SearchResult) => {
      this.searchResult = result;
    });
}

class TestContributorService {
  testContributors = getTestData();
  contributors = of(this.testContributors);
}

function getTestData(): ContributorGroup[] {
  return [
    // Not interested in the contributors data in these tests
    { name: 'Angular', order: 0, contributors: [] },
    { name: 'GDE', order: 1, contributors: [] },
  ];
}

import { Component, Input } from '@angular/core';

import { Contributor } from './contributors.model';
import { CONTENT_URL_PREFIX } from 'app/documents/document.service';

```

```

@Component({
  selector: 'aio-contributor',
  template: `
    <div [ngClass]="{ 'flipped': person.isFlipped }" class="contributor-card">

      <div class="card-front" (click)="flipCard(person)">
        <h3>{{person.name}}</h3>

        <div class="contributor-image" [style.background-image]="url('+pictureBase+(person.picture ||
noPicture)+')">
          <div class="contributor-info">
            <a *ngIf="person.bio" mat-button>
              View Bio
            </a>
            <a *ngIf="person.twitter" mat-button class="icon"
              href="https://twitter.com/{{person.twitter}}" target="_blank" (click)="$event.stopPropagation()">
              <span class="fa fa-twitter fa-2x"></span>
            </a>
            <a *ngIf="person.website" mat-button class="icon"
              href="{{person.website}}" target="_blank" (click)="$event.stopPropagation()">
              <span class="fa fa-link fa-2x"></span>
            </a>
          </div>
        </div>
      </div>

      <div class="card-back" *ngIf="person.isFlipped" (click)="flipCard(person)">
        <h3>{{person.name}}</h3>
        <p class="contributor-bio">{{person.bio}}</p>
      </div>
    </div>
  `
})
export class ContributorComponent {
  @Input() person: Contributor;
  noPicture = '_no-one.png';
  pictureBase = CONTENT_URL_PREFIX + 'images/bios/';

  flipCard(person: Contributor) {
    person.isFlipped = !person.isFlipped;
  }
}

```

@title
@description
The MIT License

Copyright (c) 2014-2018 Google, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
{
  "misko": {
    "name": "Miko Hevery",
    "picture": "misko.jpg",
    "twitter": "mhevery",
    "website": "http://misko.hevery.com",
    "bio": "Miko Hevery is the creator of AngularJS framework. He has passion for making complex things simple. He currently works at Google, but has previously worked at Adobe, Sun Microsystems, Intel, and Xerox, where he became an expert in building web applications in web related technologies such as Java, JavaScript, Flex and ActionScript.",
    "group": "Angular"
  },

  "igor": {
    "name": "Igor Minar",
    "picture": "igor-minar.jpg",
    "twitter": "IgorMinar",
    "website": "https://google.com/+IgorMinar",
    "bio": "Igor is a software engineer at Google. He is a lead on the Angular project, practitioner of test driven development, open source enthusiast, hacker. In his free time, Igor enjoys spending time with his wife and two kids, doing outdoor activities (including but not limited to sports, gardening and building retaining walls).",
    "group": "Angular"
  },

  "naomi": {
    "name": "Naomi Black",
    "picture": "naomi.jpg",
    "twitter": "naomitraveller",
    "website": "http://google.com/+NaomiBlack",
    "bio": "Naomi is Angular's TPM generalist and jack-of-all-trades. She supports Angular's internal Google users and solves hard-to-define problems. She's been at Google since 2006, as a technical program manager on projects
```

ranging from Accessibility to Google Transit. She fights daleks in her spare time.",

```
"group": "Angular"
```

```
},
```

```
"brad": {
```

```
"name": "Brad Green",
```

```
"picture": "brad-green.jpg",
```

```
"twitter": "bradlygreen",
```

```
"website": "https://plus.google.com/+BradGreen",
```

```
"bio": "Brad Green works at Google as an engineering director. Brad manages the Google Sales Platform suite of projects as well as the AngularJS framework. Prior to Google, Brad worked on the early mobile web at AvantGo, founded and sold startups, and spent a few hard years toiling as a caterer. Brad's first job out of school was as lackey to Steve Jobs at NeXT Computer writing demo software and designing his slide presentations. Brad enjoys throwing dinner parties with his wife Heather and putting on plays with his children.",
```

```
"group": "Angular"
```

```
},
```

```
"juleskremer": {
```

```
"name": "Jules Kremer",
```

```
"picture": "juleskremer.jpg",
```

```
"twitter": "jules_kremer",
```

```
"website": "https://plus.google.com/+JulesKremer",
```

```
"bio": "Jules is Head of Angular Developer Relations at Google. When not working with developers, Jules is often bending into pretzel-like shapes, creating paths through thick jungle with a machete or drinking really awesome beer.",
```

```
"group": "Angular"
```

```
},
```

```
"jelbourn": {
```

```
"name": "Jeremy Elbourn",
```

```
"picture": "jelbourn.jpg",
```

```
"twitter": "jelbourn",
```

```
"website": "https://plus.google.com/+JeremyElbourn/",
```

```
"bio": "Angular Material Team Lead. FE Engineer @ Google specializing in AngularJS, component design, and the cleanest of code.",
```

```
"group": "Angular"
```

```
},
```

```
"pete": {
```

```
"name": "Pete Bacon Darwin",
```

```
"picture": "pete.jpg",
```

```
"twitter": "petebd",
```

```
"website": "http://www.bacondarwin.com",
```

```
"bio": "AngularJS for JS Team Lead. Pete has been working on the core team since 2012 and became the team lead for the AngularJS for JS branch in November 2014. He has co-authored a book on AngularJS and regularly talks about and teaches Angular.",
```

```
"group": "Angular"
```

```
},
```

```
"stephenfluin": {
  "name": "Stephen Fluin",
  "picture": "stephenfluin.jpg",
  "twitter": "stephenfluin",
  "website": "https://plus.google.com/+stephenfluin",
  "bio": "Stephen is a Developer Advocate working on the Angular team. Before joining Google, he was a Google Expert. Stephen loves to help enterprises use technology more effectively.",
  "group": "Angular"
},
```

```
"robwormald": {
  "name": "Rob Wormald",
  "picture": "rob-wormald.jpg",
  "twitter": "robwormald",
  "website": "http://github.com/robwormald",
  "bio": "Rob is a Developer Advocate on the Angular team at Google. He's the Angular team's resident reactive programming geek and founded the Reactive Extensions for Angular project, ngrx.",
  "group": "Angular"
},
```

```
"tobias": {
  "name": "Tobias Bosch",
  "picture": "tobias.jpg",
  "twitter": "tbosch1009",
  "website": "https://plus.google.com/+TobiasBosch",
  "bio": "Tobias Bosch is a software engineer at Google. He is part of the Angular core team and works on Angular.",
  "group": "Angular"
},
```

```
"rado": {
  "name": "Rado Kirov",
  "picture": "rado.jpg",
  "twitter": "radokirov",
  "website": "https://plus.sandbox.google.com/+RadoslavKirov",
  "bio": "Rado has been on the Angular Core team since Summer 2014. Before Angular, he worked on the AdSense serving stack, responsible for serving billions of ads daily. Being passionate about open source, he made contributions to Angular as a Google-20% project, before making the fulltime jump. He is a recovering academic; ask him about error-correcting codes from algebraic curves (or don't).",
  "group": "Angular"
},
```

```
"alexeagle": {
  "name": "Alex Eagle",
  "picture": "alex-eagle.jpg",
  "twitter": "jakeherringbone",
  "website": "http://google.com/+alexeagle",
}
```

"bio": "Alex works on language tooling for JavaScript and TypeScript. Previously Alex spent five years in Google's developer testing tools. He has developed systems including Google's continuous integration service, capturing build&test failures, and explaining them to developers. Before Google, Alex worked at startups including Opower, and consulted for large government IT. In his 20% time, he created the Error-Prone static analysis tool, which detects common Java programming mistakes and reports them as compile errors.",

```
"group": "Angular"  
},
```

```
"martinprobst": {  
  "name": "Martin Probst",  
  "picture": "martin-probst.jpg",  
  "twitter": "martin_probst",  
  "website": "http://probst.io",
```

"bio": "Martin is a software engineer at Google in the AngularJS team. He holds a MSc in Software Engineering from HPI in Potsdam, Germany. Before joining the AngularJS team at Google, he worked at a database startup in the Netherlands, at EMC, at SAP, and as a freelancer. In his free time, he likes to cook and sail, not necessarily at the same time.",

```
"group": "Angular"  
},
```

```
"julieralph": {  
  "name": "Julie Ralph",  
  "picture": "julie-ralph.jpg",  
  "twitter": "SomeJulie",  
  "website": "https://plus.google.com/+JulieRalph",
```

"bio": "Julie Ralph works as a Software Engineer in Test at Google in Seattle and is the lead developer on the Angular end-to-end testing framework Protractor.",

```
"group": "Angular"  
},
```

```
"alexrickabaugh": {  
  "name": "Alex Rickabaugh",  
  "picture": "alex-rickabaugh.jpg",  
  "twitter": "synalx",  
  "website": "https://plus.google.com/+AlexRickabaugh/about",
```

"bio": "Core team member working to optimize the Angular platform for the next generation of applications, including mobile. Before joining the Angular team, Alex worked in the Google sales organization where he helped build the first large Angular application within Google.",

```
"group": "Angular"  
},
```

```
"matias": {  
  "name": "Matias Niemela",  
  "picture": "matias.jpg",  
  "twitter": "yearofmoo",  
  "website": "http://yearofmoo.com",
```

"bio": "Matias Niemela is a fullstack web developer who has been programming & building websites for over 10 years, and a core team member of AngularJS for two years. In the spring of 2015 Matias joined Angular full time at

Google. In his free time Matias loves to build complex things and is always up for public speaking, travelling and tweaking his current Vim setup.",

```
"group": "Angular"  
},
```

```
"hansl": {
```

```
  "name": "Hans Larsen",
```

```
  "picture": "hansl.jpg",
```

```
  "twitter": "hanslatwork",
```

```
  "website": "http://www.codingatwork.com/",
```

"bio": "Hans is a software engineer at Google on the Angular team and was previously at Slack. He works everyday to help make it easier for everyone to create beautiful, consistent web applications using Angular, using Material Design components and the CLI tool.",

```
  "group": "Angular"  
},
```

```
"kara": {
```

```
  "name": "Kara Erickson",
```

```
  "picture": "kara-erickson.jpg",
```

```
  "twitter": "karaforthewin",
```

```
  "website": "https://github.com/kara",
```

"bio": "Kara is a software engineer on the Angular team at Google and a co-organizer of the Angular-SF Meetup. Prior to Google, she helped build UI components in Angular for guest management systems at OpenTable. She enjoys snacking indiscriminately and probably other things too.",

```
  "group": "Angular"  
},
```

```
"chuckj": {
```

```
  "name": "Chuck Jazdzewski",
```

```
  "picture": "chuckj.jpg",
```

```
  "twitter": "chuckjaz",
```

```
  "website": "http://removingalldoubt.com",
```

"bio": "Chuck is a Software Engineer on the Angular team at Google. He is a programming language geek, UI framework and component library veteran, and has a passion for simplifying the task of programming. Before Google, he worked at Microsoft and Borland.",

```
  "group": "Angular"  
},
```

```
"vikram": {
```

```
  "name": "Vikram Subramanian",
```

```
  "picture": "vikram.jpg",
```

```
  "twitter": "vikerman",
```

"bio": "Vikram is a Software Engineer on the Angular team focused on Engineering Productivity. That means he makes sure people on the team can move fast and not break things. Vikram enjoys doing Yoga and going on walks with his daughter.",

```
  "group": "Angular"  
},
```

```

"maxsills": {
  "name": "Max Sills",
  "picture": "max-sills.jpg",
  "twitter": "angularjs",
  "website": "http://google-opensource.blogspot.com/",
  "bio": "Max Sills is Angular's Open Source lawyer.",
  "group": "Angular"
},

"pawel": {
  "name": "Pawel Kozlowski",
  "picture": "pawel.jpg",
  "twitter": "pkozlowski_os",
  "bio": "Open source hacker, AngularJS book author, AngularUI lead developer. Pawel is an software-development addict who believes in free, open source software. He is a core contributor to the AngularJS framework, AngularUI, Karma-runner and several other projects. He is the co-author of the \"Mastering Web Application Development with AngularJS\" book. When not coding, Pawel can be spotted speaking at various software development conferences.",
  "group": "Angular"
},

"paulgschwendtner": {
  "name": "Paul Gschwendtner",
  "picture": "devversion.jpg",
  "twitter": "DevVersion",
  "website": "https://github.com/DevVersion",
  "bio": "Paul is a 17-year-old developer living in Germany. While he attends school, Paul works as a core team member on Angular Material. Paul focuses on tooling and building components for Angular.",
  "group": "Angular"
},

"elad": {
  "name": "Elad Bezalel",
  "picture": "eladbezalel.jpg",
  "website": "https://github.com/EladBezalel",
  "bio": "Elad is a fullstack developer with a very strong love for design. Since 8 years old, he's been designing in Photoshop and later on fell in love with programing. This strong bond between design and computer programming gave birth to a new kind of love. And he is currently doing the combination of both, as a core member of the ngMaterial project.",
  "group": "Angular"
},

"marclaval": {
  "name": "Marc Laval",
  "picture": "marclaval.jpg",
  "twitter": "marclaval",
  "website": "https://github.com/mlaval",
  "bio": "Marc is a manager at Amadeus where he leads the team in charge of developing and recommending UI frameworks for the company. He is also an open source developer and a contributor to Angular.",

```

```

"group": "Angular"
},

"wardbell": {
  "name": "Ward Bell",
  "picture": "wardbell.jpg",
  "website": "https://github.com/wardbell",
  "twitter": "wardbell",
  "bio": "Ward is an all-around developer with JavaScript, Node.js, and .net chops. He's a frequent conference speaker and podcaster, trainer, Google Developer Expert for Angular, Microsoft MVP, and PluralSight author. He is also president of IdeaBlade, an enterprise software consulting firm and the makers of breeze.js. He would like to get more sleep and spend more time in the mountains.",
  "group": "Angular"
},

"martinstaffa": {
  "name": "Martin Staffa",
  "picture": "martinstaffa.jpg",
  "twitter": "Narretz",
  "bio": "Martin is an English major turned web developer who loves frontend stuff. He's been part of the AngularJS team since 2014. If you can't find him roaming the Github issue queues, he's probably out with his camera somewhere.",
  "group": "Angular"
},

"filipesilva": {
  "name": "Filipe Silva",
  "picture": "filipe-silva.jpg",
  "twitter": "filipematossilv",
  "website": "http://github.com/filipesilva",
  "bio": "Filipe is a passion-driven developer that always strives for the most elegant solution for each problem. He is currently an author for Angular.io, a core contributor for Angular-CLI and senior front end engineer at KonnectAgain. When not busy going through PRs, you can find him scouring reddit for new dinner recipes to cook or enjoying a craft beer in Dublin.",
  "group": "Angular"
},

"andrewseguin": {
  "name": "Andrew Seguin",
  "picture": "andrewseguin.jpg",
  "website": "http://github.com/andrewseguin",
  "bio": "Andrew is an engineer on the Angular Material team working on bringing material components to the world. When hes not obsessing over pixels and design, he is probably off somewhere having adventures with his wife and daughters.",
  "group": "Angular"
},

"jesusrodriguez": {

```

```

    "name": "Jess Rodrguez",
    "picture": "jesus-rodriguez.jpg",
    "twitter": "foxandxss",
    "website": "http://angular-tips.com",
    "bio": "Jesus is an open source lover, a book author and editor, and AngularUI lead developer. He is currently a
core contributor to the UI Bootstrap project.",
    "group": "Angular"
  },

  "crisbeto": {
    "name": "Kristiyan Kostadinov",
    "picture": "crisbeto.jpg",
    "website": "http://crisbeto.com/",
    "bio": "Kristiyan is a front-end developer, passionate open-source contributor and a core team member on Angular
Material.",
    "group": "Angular"
  },

  "gkalpak": {
    "name": "Georgios Kalpakas",
    "picture": "gkalpak.jpg",
    "twitter": "gkalpakas",
    "website": "https://github.com/gkalpak",
    "bio": "George is a Software Engineer with a passion for chess, robotics and automating stuff. He has a strong
need to know how things work (so if you already know, he'd love to have a talk with you). He has been a member of
the AngularJS team since 2014. When not doing geeky stuff, he is probably trying to convince his wife and kids to
apply programming principles in real life. (Or is it the other way around?)",
    "group": "Angular"
  },

  "mmalerba": {
    "name": "Miles Malerba",
    "picture": "mmalerba.jpg",
    "bio": "Miles is a software engineer on the Angular Material team at Google. In addition to Javascripting he enjoys
eating food and ogling cute puppies.",
    "group": "Angular"
  },

  "jasonaden": {
    "name": "Jason Aden",
    "picture": "jasonaden.jpg",
    "bio": "Jason is a software engineer at Google on the Angular Core team. He is enthusiastic about Angular and
application development in the modern age. In his free time Jason enjoys spending time with his wife and four
children and doing outdoor activities (hiking, fishing, snowboarding, etc.).",
    "group": "Angular"
  },

  "jeffwhelpley": {
    "name": "Jeff Whelpley",

```



```

    "picture": "jeffwhelpley.jpg",
    "twitter": "jeffwhelpley",
    "website": "https://medium.com/@jeffwhelpley",
    "bio": "Jeff Whelpley is a Google Developer Expert and the CTO of GetHuman. He is the co-organizer of the Angular Boston meetup group, co-creator of Angular Universal, former host of AngularAir and frequent speaker at Angular events.",
    "group": "GDE"
  },

  "pascalprecht": {
    "name": "Pascal Precht",
    "picture": "pascalprecht.jpg",
    "website": "https://twitter.com/PascalPrecht",
    "bio": "Pascal is a software engineer, author and Google Developer Expert for the Angular team. He loves contributing to open source and is the creator of the popular angular-translate module. In his spare time hes fiddling with EDM production.",
    "group": "GDE"
  },

  "deborah": {
    "name": "Deborah Kurata",
    "picture": "deborah.jpg",
    "twitter": "deborahkurata",
    "website": "http://blogs.msmvps.com/deborahk/",
    "bio": "Deborah is a software developer, author, and Google Developer Expert. She is author of several Pluralsight courses including: 'Angular 2: Getting Started' and Angular Routing",
    "group": "GDE"
  },

  "alyssa": {
    "name": "Alyssa Nicoll",
    "picture": "mickey_mouse.jpg",
    "twitter": "alyssanicoll",
    "website": "alyssa.io",
    "bio": "I am an energetic, ber passionate GDE and Web Dev. I have some Front-End and Angular courses on Egghead.io and Code School. I love to learn new things and share them with others. I Scuba Dive and have a toothless dog named 'Gummy'. My DM is always open, come talk sometime.",
    "group": "GDE"
  },

  "ralph": {
    "name": "Ralph Wang",
    "picture": "ralph.jpg",
    "twitter": "ralph_wang_gde",
    "bio": "Ralph(Zhicheng Wang) is a senior consultant at ThoughtWorks and also a GDE. He is a technology enthusiast and he is a passionate advocate of 'Simplicity, Professionalism and Sharing'. In his eighteen years of R&D career, he worked as tester, R&D engineer, project manager, product manager and CTO. He is immersed in the excitement of the arrival of the baby.",
  },

```

```

"group": "GDE"
},

"wassim": {
  "name": "Wassim Chegham",
  "picture": "wassim.jpg",
  "twitter": "manekinekko",
  "website": "https://medium.com/@wassimchegham",
  "bio": "Wassim (aka manekinekko on Twitter/Github) is a Developer Advocate at SFEIR, in Web technologies (Angular, Polymer, PWA, Web Components...). He is also a Developer Expert in Web technologies nominated by Google. He enjoys writing technical articles, meeting developers at events, speaking at conferences and contributing to open source projects. Wassim loves the Web Platform and works hard to move it forward.",
  "group": "GDE"
},

"chrisnoring": {
  "name": "Christoffer Noring",
  "picture": "chrisnoring.jpg",
  "twitter": "chris_noring",
  "website": "softchris.github.io",
  "bio": "Chris is a Full Stack Developer at McKinsey. A Google Developer Expert in Web Technologies and Angular. He is also a Nativescript Developer Expert. He is one of the organizers of the Angular conference ngVikings and an author of the book RxJS 5 Ultimate",
  "group": "GDE"
},

"jorgeucano": {
  "name": "Jorge Cano",
  "picture": "jorgeucano.jpg",
  "twitter": "jorgeucano",
  "website": "https://medium.com/@jorgeucano",
  "bio": "Jorge is a Full Stack Developer in ByteDefault, a professor for several courses related to JavaScript, a speaker, and an author of technical articles and the book \"Entendiendo Angular.\" He is a Google Developer Expert in web technologies (nominated by Google) and a NativeScript Developer Expert (nominated by Telerik).",
  "group": "GDE"
},

"toddmotto": {
  "name": "Todd Motto",
  "picture": "toddmotto.jpg",
  "twitter": "toddmotto",
  "website": "https://ultimateangular.com",
  "bio": "Owner and trainer at Ultimate Angular. Lives in England, UK. Has a love for teaching, OSS and speaking at conferences. Google Developer Expert for Web Technologies and Angular.",
  "group": "GDE"
},

"michaelprentice": {

```

```

    "name": "Michael Prentice",
    "picture": "michaelprentice.jpg",
    "twitter": "splaktar",
    "website": "https://www.DevIntent.com",
    "bio": "Lead for AngularJS Material. Owner and consultant at DevIntent. Ex-Angular GDE. Founder of the
Google Developers Group (GDG) community on the Space Coast of Florida, USA.",
    "group": "Angular"
  },

  "mikebrocchi": {
    "name": "Mike Brocchi",
    "picture": "mike-brocchi.jpg",
    "twitter": "brocco",
    "bio": "Mike is a core team member of the Angular CLI team, a GDE and is also an instructor at egghead. Mike is
passionate about helping others by writing code as well as teaching.",
    "group": "Angular"
  },

  "manfredsteyer": {
    "name": "Manfred Steyer",
    "picture": "steyer.jpg",
    "twitter": "ManfredSteyer",
    "website": "https://www.softwarearchitekt.at",
    "bio": "Trainer and Consultant with focus on Angular. Writes for O'Reilly, the German Java Magazine and Heise.
Regularly speaks at conferences.",
    "group": "GDE"
  },

  "maximalsalnikov": {
    "name": "Maxim Salnikov",
    "picture": "maximalsalnikov.jpg",
    "twitter": "webmaxru",
    "website": "https://medium.com/@webmaxru",
    "bio": "Oslo-based web front-end engineer, a Google Developer Expert in Angular, Web technologies and IoT.
Active public speaker & trainer for the developer events. Leader of Norways largest meetups dedicated to web front-
end and mobile development. Founder of ngVikings and Mobile Era conferences. Progressive Web Apps advocate.",
    "group": "GDE"
  },

  "jeremywilken": {
    "name": "Jeremy Wilken",
    "picture": "jeremywilken.jpg",
    "twitter": "gnomeontherun",
    "website": "https://gnomeontherun.com",
    "bio": "Based in Austin Texas, Jeremy is an application architect and homebrewer. He is a Google Developer
Expert in Web Technologies and Angular, with a focus on speaking and training and author of Angular in Action
and Ionic in Action.",
    "group": "GDE"
  }

```

```

},

"minko": {
  "name": "Minko Gechev",
  "picture": "minko.jpg",
  "twitter": "mgechev",
  "website": "http://blog.mgechev.com",
  "bio": "Software engineer who enjoys theoretical computer science and its practical applications. Author of the books 'Switching to Angular 2' and 'Getting Started with Angular', speaker and blogger. Working on tooling for Angular and TypeScript.",
  "group": "GDE"
},

"uri": {
  "name": "Uri Shaked",
  "picture": "urish.jpg",
  "twitter": "UriShaked",
  "website": "https://urish.org",
  "bio": "Uri Shaked is a Google Developer Expert for Web Technologies. He regularly writes about Web and IoT related technologies in his medium blog, and speaks about these topics in conferences and meetup around the world. Among his interests are reverse engineering, hardware hacking, building 3d-printed robots and games, playing music and Salsa dancing.",
  "group": "GDE"
},

"euso": {
  "name": "Josue Gutierrez",
  "picture": "josue.jpg",
  "twitter": "euso",
  "website": "http://techtam.io",
  "bio": "Based in Mexico, Josue has been web developer since the last 10 years, he is part of the Google Developer Expert Program, passionate about teaching and building communities",
  "group": "GDE"
},

"SanderElias": {
  "name": "Sander Elias",
  "picture": "sanderelias.jpg",
  "twitter": "esoSanderElias",
  "website": "https://sanderelias.nl",
  "bio": "Sander is a versed developer with over 4 decades of practice under his belt. He is also an Google Developer Expert for web, specializing in Angular. Organizer of meetups and conferences. Helping out others wherever he can. When he is not breathing code, he is fiddling around with IOT, photography, science and anything that might vaguely is gadget-like! Thinks he a master of the grill, but in reality you probably don't get a food-poisoning ;) Also, and actually the most important thing to him, he is a father of 4, and has the most patient girlfriend in the universe.",
  "group": "GDE"
},

```

```

"filipbech": {
  "name": "Filip Bruun Bech-Larsen",
  "picture": "filipbech.jpg",
  "twitter": "filipbech",
  "website": "http://filipbech.github.io/",
  "bio": "Filip is a Frontend developer from Denmark. He works at IMPACT, delivering large-scale, high-
performance e-commerce to international clients - most often build in Angular. He runs the local Angular usergroup
- ngAarhus, and gives talks/workshops around and beyond the country of Denmark.",
  "group": "GDE"
},

"ocombe": {
  "name": "Olivier Combe",
  "picture": "ocombe.jpg",
  "twitter": "ocombe",
  "bio": "Olivier is a passionate front-end engineer who loves interacting with the community by doing open source
projects (ocLazyLoad, ngx-translate), being a panelist at Angular-Air, giving talks or just chatting on Twitter and
Slack. Hes a member of the Angular Core team and works on i18n.",
  "group": "Angular"
},

"cionunes": {
  "name": "Ciro Nunes",
  "picture": "cionunes.jpg",
  "twitter": "cionunesdev",
  "bio": "Ciro is the Lead Front-end Engineer of CrossEngage and Google Developer Expert in Web Technologies.",
  "group": "GDE"
},

"elecash": {
  "name": "Ral Jimnez",
  "picture": "raul.jpg",
  "twitter": "elecash",
  "bio": "Raul works as a CEO and Front-end Architect at Byte Default for companies around the world helping
them to build high-performance web apps. In his spare time he's usually working on Videogular, involved in local
meetups, speaking at conferences and contributing to open source projects.",
  "group": "GDE"
},

"simpulton": {
  "name": "Lukas Ruebbelke",
  "picture": "lukas.jpg",
  "twitter": "simpulton",
  "bio": "Developer. Hacker. Community backer. Author and blogger. Console logger.",
  "group": "GDE"
},

```

```

"christianweyer": {
  "name": "Christian Weyer",
  "picture": "christianweyer.jpg",
  "twitter": "ChristianWeyer",
  "website": "https://www.thinktecture.com",
  "bio": "Co-founder and CTO of Thinktecture AG, as well as Google GDE and Microsoft MVP. Since two decades active as an engaged and passionate speaker on several software conferences and events all over the world. Some people call him 'Mr. Cross-Platform'.",
  "group": "GDE"
},

"shaireznik": {
  "name": "Shai Reznik",
  "picture": "shaireznik.jpg",
  "twitter": "shai_reznik",
  "website": "https://www.hirez.io",
  "bio": "Teaches Angular at HiRez.io the most entertaining online courses on the web. An experienced developer, consultant and speaker also known for his unusual crazy Angular talks such as ng-wat, ng-show, ng-rap, etc. Shai is also the organizer of the largest JavaScript group in Israel and a professional Improv performer.",
  "group": "GDE"
},

"danwahlin": {
  "name": "Dan Wahlin",
  "picture": "danwahlin.jpg",
  "twitter": "DanWahlin",
  "website": "https://codewithdan.com",
  "bio": "Dan Wahlin founded Wahlin Consulting which provides consulting and onsite/online training services on Web technologies such as JavaScript, Angular, TypeScript, Node.js, C#, ASP.NET Core, Web API, and Docker. Hes also published many developer courses on Pluralsight.com and Udemy.com. Dan is a Google GDE, Docker Captain, and Microsoft MVP and Regional Director and speaks at conferences and user groups around the world. Dan has written several books on Web technologies, hundreds of technical articles and blog posts (https://blog.codewithdan.com) and runs the 'Code with Dan Web Weekly Newsletter' - a great way to stay up on the latest technologies. Follow Dan on Twitter @DanWahlin.",
  "group": "GDE"
},

"joeeames": {
  "name": "Joe Eames",
  "picture": "joeeames.jpg",
  "twitter": "josepheames",
  "website": "https://joeeames.me",
  "bio": "Joe Eames is a developer and educator. He publishes course on Angular and JavaScript on Pluralsight.com. He is an organizer of ng-conf, a Google Developer Expert in Angular, gives lots of talks & workshops, and loves all things web.",
  "group": "GDE"
},

```

```
"willmendesneto": {
  "name": "Wilson Mendes",
  "picture": "willmendesneto.jpg",
  "twitter": "willmendesneto",
  "website": "https://willmendesneto.github.io",
  "bio": "GDE (Google Developer Expert) Angular and Web Technologies, GDG Salvador organizer, passionate about technology and active in communities with a focus on web development, including Angular, JavaScript, HTML5, CSS3, Workflow, web performance, security and Internet of things. Participates in events organization, speaker at conferences in Brazil and other countries and contributes to several open source projects.",
  "group": "GDE"
},
```

```
"jecelynyeen": {
  "name": "Jecelyn Yeen",
  "picture": "jecelynyeen.jpg",
  "twitter": "jecelynyeen",
  "website": "https://developers.google.com/experts/people/jecelyn-yeen",
  "bio": "GDE (Google Developer Expert) Angular and Web Technologies, Women Who Code KL Director, Jecelyn specializes in professional application development with technologies, including Angular, HTML5, Typescript, JavaScript, CSS, C#, NodeJs, Cloud and ASP.NET.",
  "group": "GDE"
},
```

```
"vincirufus": {
  "name": "Vinci Rufus",
  "picture": "vincirufus.jpg",
  "twitter": "areai51",
  "website": "https://developers.google.com/experts/people/vinci-rufus",
  "bio": "Director of Experience Technology at SapientRazorfish. Consults various brands on their frontend and mobile web architecture. A speaker at various forums and mentor at Launchpad Accelerator and ngGirls India. Spends free time playing with Angular, Preact, web-components ",
  "group": "GDE"
},
```

```
"thierrychatel": {
  "name": "Thierry Chatel",
  "picture": "thierrychatel.jpg",
  "twitter": "ThierryChatel",
  "website": "http://www.methotic.com",
  "bio": "Thierry is a senior consultant and trainer, specialized on Angular, and a Google Developer Expert.",
  "group": "GDE"
},
```

```
"gerardsans": {
  "name": "Gerard Sans",
  "picture": "gerardsans.jpg",
  "twitter": "gerardsans",
  "website": "https://medium.com/@gerard.sans",
}
```

"bio": "Gerard is very excited about the future of the Web and JavaScript. Always happy Computer Science Engineer and humble Google Developer Expert. He loves to share his learnings by giving talks, trainings and writing about cool technologies. He loves running AngularZone and GraphQL London, mentoring students and giving back to the community.",

"group": "GDE"
},

"amcdnl": {

"name": "Austin McDaniel",

"picture": "amcdnl.jpeg",

"twitter": "amcdnl",

"website": "https://amcdnl.com",

"bio": "Austin is an software architect with a passion for JavaScript and Angular. Austin loves to share his experiences with other like-minded developers by giving talks, blogging, podcasting and open-sourcing.",

"group": "Angular"

},

"nirkaufman": {

"name": "Nir Kaufman",

"picture": "nirkaufman.jpg",

"twitter": "nirkaufman",

"website": "http://ngnir.life/",

"bio": "Nir is a Principal Frontend Consultant & Head of the Angular department at 500Tech, Google Developer Expert and community leader. He organizes the largest Angular meetup group in Israel (Angular-IL), talks and teaches about front-end technologies around the world. He is also the author of two books about Angular and the founder of the 'Frontend Band'.",

"group": "GDE"

},

"achautard": {

"name": "Alain Chautard",

"picture": "alainchautard.png",

"twitter": "AlainChautard",

"website": "http://www.angulartraining.com",

"bio": "Alain Chautard is a Google Developer Expert in Web Technologies / Angular. He started working with Angular JS in 2011. Since then he has worked with all Angular versions on a daily basis, both as a developer and as a technical trainer. He is the organizer of the Sacramento Angular Meetup group, co-organizer of the Google Developer Group chapter in Sacramento, California, and published author of the Packt video course 'Getting Started with Angular',

"group": "GDE"

},

"coryrylan": {

"name": "Cory Rylan",

"picture": "cory-rylan.jpg",

"twitter": "coryrylan",

"website": "https://coryrylan.com",

"bio": "Cory is a full time front end web developer. He works full time building responsive web applications and

progressive web apps. When not building web apps he is busy teaching Angular and other web technologies in workshops and conferences. He loves the web and is optimistic of the places it can take us.",

```
"group": "GDE"  
},
```

```
"mhartington": {
```

```
"name": "Mike Hartington",  
"picture": "mhartington.png",  
"twitter": "mhartington",  
"website": "https://mhartington.io",
```

"bio": "Mike is a Developer Advocate for the Ionic Framework and a GDE in Angular. He spends most of his time making fast PWAs and exploring emerging web standards. When not behind a keyboard, you'll probably find him with a guitar and beer.",

```
"group": "GDE"  
},
```

```
"juristr": {
```

```
"name": "Juri Strumpflohner",  
"picture": "juristr.jpg",  
"twitter": "juristr",  
"website": "https://juristr.com",
```

"bio": "Juri is a software engineer and freelance trainer and consultant currently mostly focusing on the frontend side using JavaScript, TypeScript and Angular. He has a passion for teaching and sharing his knowledge and experiences with others. This mostly happens by writing tech articles for his personal blog, by creating video courses for Egghead.io, during on-site workshops at companies or by speaking at conferences. In his free time he enjoys practicing Yoseikan Budo, a martial art where he currently owns the 3rd DAN black belt.",

```
"group": "GDE"  
},
```

```
"mashhoodr": {
```

```
"name": "Mashhood Rastgar",  
"picture": "mashhood.jpg",  
"twitter": "mashhoodr",  
"website": "http://imars.info/",
```

"bio": "Mashhood is the principal technical consultant at Recurship and a Google Developer Expert. He works with different startups in US and EU to help them crawl through the technical maze and quickly build amazing products focused around the problems they are trying to solve. He specializes in using the latest web technologies available to execute the best possible solutions.",

```
"group": "GDE"  
},
```

```
"kimmaida": {
```

```
"name": "Kim Maida",  
"picture": "kimmaida.jpg",  
"twitter": "KimMaida",  
"website": "https://kmaida.io/",
```

"bio": "Kim is an Angular consultant, developer, speaker, writer, and Google Developer Expert. She is passionate about learning from and sharing knowledge with other developers through blogging, speaking,

```

workshops, and open source.",
  "group": "GDE"
},

"elanaolson": {
  "name": "Elana Olson",
  "picture": "elanaolson.jpg",
  "twitter": "elanathellama",
  "bio": "Elana is a Developer Relations intern on the Angular team at Google. She is working on migration paths
from AngularJS to Angular and would love to chat about your experience with upgrading.",
  "group": "Angular"
},

"kevinyang": {
  "name": "Kevin Yang",
  "picture": "kevinyang.jpg",
  "twitter": "chgc",
  "website": "https://blog.kevinyang.net/",
  "bio": "Kevin is a Angular Taiwan, Angular Girls Taiwan community organizer. He loves sharing knowledge with
other developers through blogging, speaking, workshops.",
  "group": "GDE"
},

"sajee": {
  "name": "Sajeetharan Sinnathurai",
  "picture": "sajee.jpg",
  "twitter": "kokkisajee",
  "website": "https://sajeetharan.herokuapp.com/",
  "bio": "Sajeetharan is a Developer, Top contributor on stackoverflow for #Angular, ng-SriLanka organizer. He
makes use of his extensive knowledge over the past years to contribute to community to make the world a better
place.",
  "group": "GDE"
},

"lacolaco": {
  "name": "Suguru Inatomi",
  "picture": "lacolaco.jpg",
  "twitter": "laco2net",
  "website": "https://lacolaco.net",
  "bio": "Suguru is a community-loving Frontend developer and a lead of Angular Japan User Group. He organizes
the largest Angular event in Japan (ng-japan). And he is a contributor to Angular by sending patches, writing,
speaking, and localizing resources in Japanese.",
  "group": "GDE"
},

"katerina": {
  "name": "Katerina Skroumpelou",
  "picture": "katerina.jpg",

```

```

    "twitter": "psybercity",
    "website": "https://mandarini.github.io/",
    "bio": "Katerina is a front end software engineer, a conference speaker and AngularAthens meetup organizer. She
is obsessed with sharing knowledge about things she loves. She is also trying to support diversity in the community.
She lives with her cat in Athens.",
    "group": "GDE"
  },

  "blove": {
    "name": "Brian Love",
    "picture": "brian-love.jpg",
    "twitter": "brian_love",
    "website": "https://brianflove.com",
    "bio": "Brian is a software engineer and GDE in Angular with a passion for learning, writing, speaking, teaching
and mentoring. Brian has been building web applications for over 20 years and has long been a fanboy of JavaScript.
When not in front of his Macbook Pro Brian is in the Rocky Mountains skiing or hiking.",
    "group": "GDE"
  }
}

```

The MIT License

Copyright (c) 2017-2018 Google, Inc. <http://angular.io>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

/**

```

* @license Angular v0.0.0-PLACEHOLDER
* (c) 2010-2018 Google, Inc. https://angular.io/
* License: MIT
*/

```

The MIT License

Copyright (c) 2014-2018 Google, Inc. <http://angular.io>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.2 @angular/material 7.2.1

1.2.1 Available under license :

```
import {buildConfig} from './build-config';
import MagicString from 'magic-string';

/** License banner from the build config that will be removed in all source files. */
const licenseBanner = buildConfig.licenseBanner;

/**
 * Rollup plugin that removes all license banners of source files.
 * This is necessary to avoid having the license comment repeated in the output.
 */
export const rollupRemoveLicensesPlugin = {
  name: 'rollup-clean-duplicate-licenses',
  transform: (code: string) => {
    const newContent = new MagicString(code);

    // Walks through every occurrence of a license comment and overwrites it with an empty string.
    for (let pos = -1; (pos = code.indexOf(licenseBanner, pos + 1)) !== -1; null) {
      newContent.overwrite(pos, pos + licenseBanner.length, "");
    }

    return {
      code: newContent.toString(),
      map: newContent.generateMap({ hires: true })
    };
  }
}
```

};
The MIT License

Copyright (c) 2019 Google LLC.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.3 angular 1.5.9

1.3.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the

outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable

copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and

do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

Copyright 2011 Mike Samuel et al

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.4 angular ui-grid 4.0.4

1.5 angular2-moment 1.7.0

1.5.1 Available under license :

The MIT License (MIT)

Copyright (c) 2013-2017 Uri Shaked and contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.6 Bootstrap 4 4.0.0

1.6.1 Available under license :

```
---
layout: docs
title: License FAQs
description: Commonly asked questions about Bootstrap's open source license.
group: about
---
```

Bootstrap is released under the MIT license and is copyright `{{ site.time | date: "%Y" }}` Twitter. Boiled down to smaller chunks, it can be described with the following conditions.

It requires you to:

- * Keep the license and copyright notice included in Bootstrap's CSS and JavaScript files when you use them in your works

It permits you to:

- Freely download and use Bootstrap, in whole or in part, for personal, private, company internal, or commercial purposes
- Use Bootstrap in packages or distributions that you create
- Modify the source code
- Grant a sublicense to modify and distribute Bootstrap to third parties not included in the license

It forbids you to:

- Hold the authors and license owners liable for damages as Bootstrap is provided without warranty
- Hold the creators or copyright holders of Bootstrap liable
- Redistribute any piece of Bootstrap without proper attribution
- Use any marks owned by Twitter in any way that might state or imply that Twitter endorses your distribution
- Use any marks owned by Twitter in any way that might state or imply that you created the Twitter software in question

It does not require you to:

- Include the source of Bootstrap itself, or of any modifications you may have made to it, in any redistribution you

may assemble that includes it

- Submit changes that you make to Bootstrap back to the Bootstrap project (though such feedback is encouraged)

The full Bootstrap license is located [in the project repository]({{ site.repo }}/blob/master/LICENSE) for more information.

The MIT License (MIT)

Copyright (c) 2011-2017 Twitter, Inc.

Copyright (c) 2011-2017 The Bootstrap Authors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.7 chart.js 2.7.2

1.7.1 Available under license :

The MIT License (MIT)

Copyright (c) 2018 Chart.js Contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN

AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License

Chart.js is [open source](https://github.com/chartjs/Chart.js) and available under the [MIT license](http://opensource.org/licenses/MIT).

1.8 Commons Net 3.3

1.8.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a

copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct

or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of

this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following

boilerplate notice, with the fields enclosed by brackets "[]"
replaced with your own identifying information. (Don't include
the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

Apache Commons Net

Copyright 2001-2012 The Apache Software Foundation

This product includes software developed by
The Apache Software Foundation (<http://www.apache.org/>).

1.9 commons-codec 1.9

1.9.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction,
and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by
the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all
other entities that control, are controlled by, or are under common

control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
 - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or

documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. **Limitation of Liability.** In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill,

work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Apache Commons Codec

Copyright 2002-2013 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

`src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java`

1.10 commons-io 2.5

1.10.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object

form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a

file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Apache Commons IO
Copyright 2002-2016 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

1.11 commons-text 1.4

1.11.1 Available under license :

/*

* Licensed to the Apache Software Foundation (ASF) under one or more
* contributor license agreements. See the NOTICE file distributed with
* this work for additional information regarding copyright ownership.
* The ASF licenses this file to You under the Apache License, Version 2.0
* (the "License"); you may not use this file except in compliance with
* the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.

*/

Apache Commons Text
Copyright 2014-2018 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or

agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.12 core-js 2.5.7

1.12.1 Available under license :

Copyright (c) 2014-2016 Denis Pushkarev

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.13 csv.js 1.1.1

1.14 flink-connector-kafka-0.9_2.10 1.2.0

1.14.1 Available under license :

flink-connector-kafka-0.9

Copyright 2014-2017 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (<http://www.apache.org/>).

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or

Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

1.15 flink-streaming-java_2.10 1.2.0

1.15.1 Available under license :

flink-streaming-java
Copyright 2014-2017 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction,
and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by
the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all
other entities that control, are controlled by, or are under common
control with that entity. For the purposes of this definition,
"control" means (i) the power, direct or indirect, to cause the
direction or management of such entity, whether by contract or
otherwise, or (ii) ownership of fifty percent (50%) or more of the
outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity
exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of

this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only

on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.16 Font Awesome 4.6.3

1.16.1 Available under license :

SIL OPEN FONT LICENSE

Version 1.1 - 26 February 2007

PREAMBLE

The goals of the Open Font License (OFL) are to stimulate worldwide development of collaborative font projects, to support the font creation efforts of academic and linguistic communities, and to provide a free and open framework in which fonts may be shared and improved in partnership with others.

The OFL allows the licensed fonts to be used, studied, modified and redistributed freely as long as they are not sold by themselves. The fonts, including any derivative works, can be bundled, embedded, redistributed and/or sold with any software provided that any reserved names are not used by derivative works. The fonts and derivatives, however, cannot be released under any other type of license. The requirement for fonts to remain under this license does not apply to any document created using the fonts or their derivatives.

DEFINITIONS

"Font Software" refers to the set of files released by the Copyright Holder(s) under this license and clearly marked as such. This may include source files, build scripts and documentation.

"Reserved Font Name" refers to any names specified as such after the copyright statement(s).

"Original Version" refers to the collection of Font Software components as distributed by the Copyright Holder(s).

"Modified Version" refers to any derivative made by adding to, deleting, or substituting in part or in whole any of the components of the Original Version, by changing formats or by porting the Font Software to a new environment.

"Author" refers to any designer, engineer, programmer, technical writer or other person who contributed to the Font Software.

PERMISSION & CONDITIONS

Permission is hereby granted, free of charge, to any person obtaining a copy of the Font Software, to use, study, copy, merge, embed, modify, redistribute, and sell modified and unmodified copies of the Font Software, subject to the following conditions:

- 1) Neither the Font Software nor any of its individual components, in Original or Modified Versions, may be sold by itself.
- 2) Original or Modified Versions of the Font Software may be bundled, redistributed and/or sold with any software, provided that each copy contains the above copyright notice and this license. These can be included either as stand-alone text files, human-readable headers or in the appropriate machine-readable metadata fields within text or binary files as long as those fields can be easily viewed by the user.
- 3) No Modified Version of the Font Software may use the Reserved Font Name(s) unless explicit written permission is granted by the corresponding Copyright Holder. This restriction only applies to the primary font name as presented to the users.

4) The name(s) of the Copyright Holder(s) or the Author(s) of the Font Software shall not be used to promote, endorse or advertise any Modified Version, except to acknowledge the contribution(s) of the Copyright Holder(s) and the Author(s) or with their explicit written permission.

5) The Font Software, modified or unmodified, in part or in whole, must be distributed entirely under this license, and must not be distributed under any other license. The requirement for fonts to remain under this license does not apply to any document created using the Font Software.

TERMINATION

This license becomes null and void if any of the above conditions are not met.

DISCLAIMER

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

The MIT License (MIT)

Copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.17 ftpserver core 1.0.6

1.17.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain

separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the

origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

Copyright (c) 2004-2007 QOS.ch

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining
a copy of this software and associated documentation files (the
"Software"), to deal in the Software without restriction, including
without limitation the rights to use, copy, modify, merge, publish,
distribute, and/or sell copies of the Software, and to permit persons
to whom the Software is furnished to do so, provided that the above
copyright notice(s) and this permission notice appear in all copies of
the Software and that both the above copyright notice(s) and this
permission notice appear in supporting documentation.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF
MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT
OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR
HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY
SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER
RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF
CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN
CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Except as contained in this notice, the name of a copyright holder
shall not be used in advertising or otherwise to promote the sale, use
or other dealings in this Software without prior written authorization
of the copyright holder.

```
// -----  
// NOTICE file corresponding to the section 4d of The Apache License,  
// Version 2.0, in this case for Apache FtpServer Parent  
// -----
```

Apache FtpServer Parent
Copyright 2003-2011 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

```
/*
 * Licensed to the Apache Software Foundation (ASF) under one
 * or more contributor license agreements. See the NOTICE file
 * distributed with this work for additional information
 * regarding copyright ownership. The ASF licenses this file
 * to you under the Apache License, Version 2.0 (the
 * "License"); you may not use this file except in compliance
 * with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing,
 * software distributed under the License is distributed on an
 * "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY
 * KIND, either express or implied. See the License for the
 * specific language governing permissions and limitations
 * under the License.
 */
```

1.18 gson 2.8.0

1.18.1 Available under license :

Apache 2.0

<http://www.apache.org/licenses/LICENSE-2.0.txt>

1.19 jackson-annotations 2.8.0

1.20 jersey-client 2.25

1.20.1 Available under license :

CDDL+GPL License

http://glassfish.java.net/public/CDDL+GPL_1_1.html

1.21 jewelcli 0.8.2

1.21.1 Available under license :

BSD License

Copyright (c) 2000-2006, www.hamcrest.org
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of Hamcrest nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes software developed by
The Apache Software Foundation (<http://www.apache.org/>).
ASM: a very small and fast Java bytecode manipulation framework
Copyright (c) 2000,2002,2003 INRIA, France Telecom
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright

notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but

not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their

Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with

the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.
Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. **Limitation of Liability.** In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. **Accepting Warranty or Additional Liability.** While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.22 jjwt 0.7.0

1.22.1 Available under license :

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition,

"control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and

 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

 - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or,

within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all

other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "{}" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright {yyyy} {name of copyright owner}

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.23 JSch 0.1.53

1.23.1 Available under license :

Copyright (c) 2002-2015 Atsuhiko Yamanaka, JCraft, Inc.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL JCRAFT, INC. OR ANY CONTRIBUTORS TO THIS SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

JSch 0.0.* was released under the GNU LGPL license. Later, we have switched over to a BSD-style license.

Copyright (c) 2002-2015 Atsuhiko Yamanaka, JCraft, Inc.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL JCRAFT, INC. OR ANY CONTRIBUTORS TO THIS SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT,

INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

<http://www.jcraft.com/jsch/LICENSE.txt>

1.24 jsoup 1.10.2

1.24.1 Available under license :

The MIT License

2009-2017, Jonathan Hedley <jonathan@hedley.net>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.25 libpcap 1.5.3 :December 18, 2013

1.25.1 Available under license :

License: BSD

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright

notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. The names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

/*-

* Copyright (c) 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997

* The Regents of the University of California. All rights reserved.

*

* This code is derived from the Stanford/CMU enet packet filter,

* (net/enet.c) distributed as part of 4.3BSD, and code contributed

* to Berkeley by Steven McCanne and Van Jacobson both of Lawrence

* Berkeley Laboratory.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

* documentation and/or other materials provided with the distribution.

* 3. All advertising materials mentioning features or use of this software

* must display the following acknowledgement:

* This product includes software developed by the University of

* California, Berkeley and its contributors.

* 4. Neither the name of the University nor the names of its contributors

* may be used to endorse or promote products derived from this software

* without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND

* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE

* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS

* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY

* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF

* SUCH DAMAGE.

*

* @(#) \$Header: /tcpdump/master/libpcap/pcap-bpf.h,v 1.50 2007-04-01 21:43:55 guy Exp \$ (LBL)

```
*/
.\"
.\" Copyright (c) 1987, 1988, 1989, 1990, 1991, 1992, 1994, 1995, 1996, 1997
.\" The Regents of the University of California. All rights reserved.
.\" All rights reserved.
.\"
.\" Redistribution and use in source and binary forms, with or without
.\" modification, are permitted provided that: (1) source code distributions
.\" retain the above copyright notice and this paragraph in its entirety, (2)
.\" distributions including binary code include the above copyright notice and
.\" this paragraph in its entirety in the documentation or other materials
.\" provided with the distribution, and (3) all advertising materials mentioning
.\" features or use of this software display the following acknowledgement:
.\" "This product includes software developed by the University of California,
.\" Lawrence Berkeley Laboratory and its contributors." Neither the name of
.\" the University nor the names of its contributors may be used to endorse
.\" or promote products derived from this software without specific prior
.\" written permission.
.\" THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED
.\" WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF
.\" MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
```

```
# Copyright 1991 by the Massachusetts Institute of Technology
#
# Permission to use, copy, modify, distribute, and sell this software and its
# documentation for any purpose is hereby granted without fee, provided that
# the above copyright notice appear in all copies and that both that
# copyright notice and this permission notice appear in supporting
# documentation, and that the name of M.I.T. not be used in advertising or
# publicity pertaining to distribution of the software without specific,
# written prior permission. M.I.T. makes no representations about the
# suitability of this software for any purpose. It is provided "as is"
# without express or implied warranty.
#
# Calling this script install-sh is preferred over install.sh, to prevent
# 'make' implicit rules from creating a file called install from it
# when there is no Makefile.
#
# This script is compatible with the BSD install script, but was written
# from scratch. It can only install one file at a time, a restriction
# shared with many OS's install programs.
```

1.26 log4j 1.2.17

1.26.1 Available under license :

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or

agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright 1999-2005 The Apache Software Foundation

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Apache log4j

Copyright 2007 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Apache log4j

Copyright 2010 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

<!--

Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

-->

1.27 material-design-icons-iconfont 3.0.3

1.27.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted"

means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and

attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the

appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software

distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.
Attribution 4.0 International

Creative Commons Corporation ("Creative Commons") is not a law firm and does not provide legal services or legal advice. Distribution of Creative Commons public licenses does not create a lawyer-client or other relationship. Creative Commons makes its licenses and related information available on an "as-is" basis. Creative Commons gives no warranties regarding its licenses, any material licensed under their terms and conditions, or any related information. Creative Commons disclaims all liability for damages resulting from their use to the fullest extent possible.

Using Creative Commons Public Licenses

Creative Commons public licenses provide a standard set of terms and conditions that creators and other rights holders may use to share original works of authorship and other material subject to copyright and certain other rights specified in the public license below. The following considerations are for informational purposes only, are not exhaustive, and do not form part of our licenses.

Considerations for licensors: Our public licenses are intended for use by those authorized to give the public permission to use material in ways otherwise restricted by copyright and certain other rights. Our licenses are irrevocable. Licensors should read and understand the terms and conditions of the license they choose before applying it. Licensors should also secure all rights necessary before applying our licenses so that the public can reuse the material as expected. Licensors should clearly mark any material not subject to the license. This includes other CC-licensed material, or material used under an exception or limitation to copyright. More considerations for licensors:
wiki.creativecommons.org/Considerations_for_licensors

Considerations for the public: By using one of our public licenses, a licensor grants the public permission to use the licensed material under specified terms and conditions. If the licensor's permission is not necessary for any reason--for example, because of any applicable exception or limitation to copyright--then that use is not regulated by the license. Our licenses grant only permissions under copyright and certain

other rights that a licensor has authority to grant. Use of the licensed material may still be restricted for other reasons, including because others have copyright or other rights in the material. A licensor may make special requests, such as asking that all changes be marked or described. Although not required by our licenses, you are encouraged to respect those requests where reasonable. More considerations for the public:

wiki.creativecommons.org/Considerations_for_licensees

Creative Commons Attribution 4.0 International Public License

By exercising the Licensed Rights (defined below), You accept and agree to be bound by the terms and conditions of this Creative Commons Attribution 4.0 International Public License ("Public License"). To the extent this Public License may be interpreted as a contract, You are granted the Licensed Rights in consideration of Your acceptance of these terms and conditions, and the Licensor grants You such rights in consideration of benefits the Licensor receives from making the Licensed Material available under these terms and conditions.

Section 1 -- Definitions.

- a. Adapted Material means material subject to Copyright and Similar Rights that is derived from or based upon the Licensed Material and in which the Licensed Material is translated, altered, arranged, transformed, or otherwise modified in a manner requiring permission under the Copyright and Similar Rights held by the Licensor. For purposes of this Public License, where the Licensed Material is a musical work, performance, or sound recording, Adapted Material is always produced where the Licensed Material is synched in timed relation with a moving image.
- b. Adapter's License means the license You apply to Your Copyright and Similar Rights in Your contributions to Adapted Material in accordance with the terms and conditions of this Public License.
- c. Copyright and Similar Rights means copyright and/or similar rights closely related to copyright including, without limitation, performance, broadcast, sound recording, and Sui Generis Database Rights, without regard to how the rights are labeled or categorized. For purposes of this Public License, the rights specified in Section 2(b)(1)-(2) are not Copyright and Similar Rights.

- d. Effective Technological Measures means those measures that, in the absence of proper authority, may not be circumvented under laws fulfilling obligations under Article 11 of the WIPO Copyright Treaty adopted on December 20, 1996, and/or similar international agreements.
- e. Exceptions and Limitations means fair use, fair dealing, and/or any other exception or limitation to Copyright and Similar Rights that applies to Your use of the Licensed Material.
- f. Licensed Material means the artistic or literary work, database, or other material to which the Licensor applied this Public License.
- g. Licensed Rights means the rights granted to You subject to the terms and conditions of this Public License, which are limited to all Copyright and Similar Rights that apply to Your use of the Licensed Material and that the Licensor has authority to license.
- h. Licensor means the individual(s) or entity(ies) granting rights under this Public License.
- i. Share means to provide material to the public by any means or process that requires permission under the Licensed Rights, such as reproduction, public display, public performance, distribution, dissemination, communication, or importation, and to make material available to the public including in ways that members of the public may access the material from a place and at a time individually chosen by them.
- j. Sui Generis Database Rights means rights other than copyright resulting from Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, as amended and/or succeeded, as well as other essentially equivalent rights anywhere in the world.
- k. You means the individual or entity exercising the Licensed Rights under this Public License. Your has a corresponding meaning.

Section 2 -- Scope.

- a. License grant.
 - 1. Subject to the terms and conditions of this Public License, the Licensor hereby grants You a worldwide, royalty-free, non-sublicensable, non-exclusive, irrevocable license to exercise the Licensed Rights in the Licensed Material to:

- a. reproduce and Share the Licensed Material, in whole or in part; and
 - b. produce, reproduce, and Share Adapted Material.
2. Exceptions and Limitations. For the avoidance of doubt, where Exceptions and Limitations apply to Your use, this Public License does not apply, and You do not need to comply with its terms and conditions.
3. Term. The term of this Public License is specified in Section 6(a).
4. Media and formats; technical modifications allowed. The Licensor authorizes You to exercise the Licensed Rights in all media and formats whether now known or hereafter created, and to make technical modifications necessary to do so. The Licensor waives and/or agrees not to assert any right or authority to forbid You from making technical modifications necessary to exercise the Licensed Rights, including technical modifications necessary to circumvent Effective Technological Measures. For purposes of this Public License, simply making modifications authorized by this Section 2(a) (4) never produces Adapted Material.
5. Downstream recipients.
 - a. Offer from the Licensor -- Licensed Material. Every recipient of the Licensed Material automatically receives an offer from the Licensor to exercise the Licensed Rights under the terms and conditions of this Public License.
 - b. No downstream restrictions. You may not offer or impose any additional or different terms or conditions on, or apply any Effective Technological Measures to, the Licensed Material if doing so restricts exercise of the Licensed Rights by any recipient of the Licensed Material.
6. No endorsement. Nothing in this Public License constitutes or may be construed as permission to assert or imply that You are, or that Your use of the Licensed Material is, connected with, or sponsored, endorsed, or granted official status by, the Licensor or others designated to receive attribution as provided in Section 3(a)(1)(A)(i).

b. Other rights.

1. Moral rights, such as the right of integrity, are not licensed under this Public License, nor are publicity, privacy, and/or other similar personality rights; however, to the extent possible, the Licensor waives and/or agrees not to assert any such rights held by the Licensor to the limited extent necessary to allow You to exercise the Licensed Rights, but not otherwise.
2. Patent and trademark rights are not licensed under this Public License.
3. To the extent possible, the Licensor waives any right to collect royalties from You for the exercise of the Licensed Rights, whether directly or through a collecting society under any voluntary or waivable statutory or compulsory licensing scheme. In all other cases the Licensor expressly reserves any right to collect such royalties.

Section 3 -- License Conditions.

Your exercise of the Licensed Rights is expressly made subject to the following conditions.

a. Attribution.

1. If You Share the Licensed Material (including in modified form), You must:
 - a. retain the following if it is supplied by the Licensor with the Licensed Material:
 - i. identification of the creator(s) of the Licensed Material and any others designated to receive attribution, in any reasonable manner requested by the Licensor (including by pseudonym if designated);
 - ii. a copyright notice;
 - iii. a notice that refers to this Public License;
 - iv. a notice that refers to the disclaimer of warranties;
 - v. a URI or hyperlink to the Licensed Material to the

extent reasonably practicable;

b. indicate if You modified the Licensed Material and retain an indication of any previous modifications; and

c. indicate the Licensed Material is licensed under this Public License, and include the text of, or the URI or hyperlink to, this Public License.

2. You may satisfy the conditions in Section 3(a)(1) in any reasonable manner based on the medium, means, and context in which You Share the Licensed Material. For example, it may be reasonable to satisfy the conditions by providing a URI or hyperlink to a resource that includes the required information.

3. If requested by the Licensor, You must remove any of the information required by Section 3(a)(1)(A) to the extent reasonably practicable.

4. If You Share Adapted Material You produce, the Adapter's License You apply must not prevent recipients of the Adapted Material from complying with this Public License.

Section 4 -- Sui Generis Database Rights.

Where the Licensed Rights include Sui Generis Database Rights that apply to Your use of the Licensed Material:

a. for the avoidance of doubt, Section 2(a)(1) grants You the right to extract, reuse, reproduce, and Share all or a substantial portion of the contents of the database;

b. if You include all or a substantial portion of the database contents in a database in which You have Sui Generis Database Rights, then the database in which You have Sui Generis Database Rights (but not its individual contents) is Adapted Material; and

c. You must comply with the conditions in Section 3(a) if You Share all or a substantial portion of the contents of the database.

For the avoidance of doubt, this Section 4 supplements and does not replace Your obligations under this Public License where the Licensed Rights include other Copyright and Similar Rights.

Section 5 -- Disclaimer of Warranties and Limitation of Liability.

- a. UNLESS OTHERWISE SEPARATELY UNDERTAKEN BY THE LICENSOR, TO THE EXTENT POSSIBLE, THE LICENSOR OFFERS THE LICENSED MATERIAL AS-IS AND AS-AVAILABLE, AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE LICENSED MATERIAL, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHER. THIS INCLUDES, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OR ABSENCE OF ERRORS, WHETHER OR NOT KNOWN OR DISCOVERABLE. WHERE DISCLAIMERS OF WARRANTIES ARE NOT ALLOWED IN FULL OR IN PART, THIS DISCLAIMER MAY NOT APPLY TO YOU.
- b. TO THE EXTENT POSSIBLE, IN NO EVENT WILL THE LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE) OR OTHERWISE FOR ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, EXEMPLARY, OR OTHER LOSSES, COSTS, EXPENSES, OR DAMAGES ARISING OUT OF THIS PUBLIC LICENSE OR USE OF THE LICENSED MATERIAL, EVEN IF THE LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES, COSTS, EXPENSES, OR DAMAGES. WHERE A LIMITATION OF LIABILITY IS NOT ALLOWED IN FULL OR IN PART, THIS LIMITATION MAY NOT APPLY TO YOU.
- c. The disclaimer of warranties and limitation of liability provided above shall be interpreted in a manner that, to the extent possible, most closely approximates an absolute disclaimer and waiver of all liability.

Section 6 -- Term and Termination.

- a. This Public License applies for the term of the Copyright and Similar Rights licensed here. However, if You fail to comply with this Public License, then Your rights under this Public License terminate automatically.
- b. Where Your right to use the Licensed Material has terminated under Section 6(a), it reinstates:
 1. automatically as of the date the violation is cured, provided it is cured within 30 days of Your discovery of the violation; or
 2. upon express reinstatement by the Licensor.

For the avoidance of doubt, this Section 6(b) does not affect any right the Licensor may have to seek remedies for Your violations of this Public License.

c. For the avoidance of doubt, the Licensor may also offer the Licensed Material under separate terms or conditions or stop distributing the Licensed Material at any time; however, doing so will not terminate this Public License.

d. Sections 1, 5, 6, 7, and 8 survive termination of this Public License.

Section 7 -- Other Terms and Conditions.

a. The Licensor shall not be bound by any additional or different terms or conditions communicated by You unless expressly agreed.

b. Any arrangements, understandings, or agreements regarding the Licensed Material not stated herein are separate from and independent of the terms and conditions of this Public License.

Section 8 -- Interpretation.

a. For the avoidance of doubt, this Public License does not, and shall not be interpreted to, reduce, limit, restrict, or impose conditions on any use of the Licensed Material that could lawfully be made without permission under this Public License.

b. To the extent possible, if any provision of this Public License is deemed unenforceable, it shall be automatically reformed to the minimum extent necessary to make it enforceable. If the provision cannot be reformed, it shall be severed from this Public License without affecting the enforceability of the remaining terms and conditions.

c. No term or condition of this Public License will be waived and no failure to comply consented to unless expressly agreed to by the Licensor.

d. Nothing in this Public License constitutes or may be interpreted as a limitation upon, or waiver of, any privileges and immunities that apply to the Licensor or You, including from the legal processes of any jurisdiction or authority.

=====

Creative Commons is not a party to its public licenses.
Notwithstanding, Creative Commons may elect to apply one of its public licenses to material it publishes and in those instances will be

considered the "Licensor." Except for the limited purpose of indicating that material is shared under a Creative Commons public license or as otherwise permitted by the Creative Commons policies published at creativecommons.org/policies, Creative Commons does not authorize the use of the trademark "Creative Commons" or any other trademark or logo of Creative Commons without its prior written consent including, without limitation, in connection with any unauthorized modifications to any of its public licenses or any other arrangements, understandings, or agreements concerning use of licensed material. For the avoidance of doubt, this paragraph does not form part of the public licenses.

Creative Commons may be contacted at creativecommons.org.

1.28 postgresql 9.4.1212.jre7

1.28.1 Available under license :

Copyright (c) 1997, PostgreSQL Global Development Group
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.29 PostgreSQL 9.5.9

1.29.1 Available under license :

This regular expression package was originally developed by Henry Spencer.

It bears the following copyright notice:

Copyright (c) 1998, 1999 Henry Spencer. All rights reserved.

Development of this software was funded, in part, by Cray Research Inc., UUNET Communications Services Inc., Sun Microsystems Inc., and Scriptics Corporation, none of whom are responsible for the results. The author thanks all of them.

Redistribution and use in source and binary forms -- with or without modification -- are permitted for any purpose, provided that redistributions in source form retain this entire copyright notice and indicate the origin and nature of any modifications.

I'd appreciate being given credit for this package in the documentation of software which uses it, but that is not a requirement.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL HENRY SPENCER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

PostgreSQL adopted the code out of Tcl 8.4.1. Portions of regc_locale.c and re_syntax.n were developed by Tcl developers other than Henry; these files bear the Tcl copyright and license notice:

This software is copyrighted by the Regents of the University of California, Sun Microsystems, Inc., Scriptics Corporation, ActiveState Corporation and other parties. The following terms apply to all files associated with the software unless explicitly disclaimed in individual files.

The authors hereby grant permission to use, copy, modify, distribute, and license this software and its documentation for any purpose, provided

that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royalty fee is required for any of the authorized uses. Modifications to this software may be copyrighted by their authors and need not follow the licensing terms described here, provided that the new terms are clearly indicated on the first page of each file where they apply.

IN NO EVENT SHALL THE AUTHORS OR DISTRIBUTORS BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE, ITS DOCUMENTATION, OR ANY DERIVATIVES THEREOF, EVEN IF THE AUTHORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE AUTHORS AND DISTRIBUTORS SPECIFICALLY DISCLAIM ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. THIS SOFTWARE IS PROVIDED ON AN "AS IS" BASIS, AND THE AUTHORS AND DISTRIBUTORS HAVE NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

GOVERNMENT USE: If you are acquiring this software on behalf of the U.S. government, the Government shall have only "Restricted Rights" in the software and related documentation as defined in the Federal Acquisition Regulations (FARs) in Clause 52.227.19 (c) (2). If you are acquiring the software on behalf of the Department of Defense, the software shall be classified as "Commercial Computer Software" and the Government shall have only "Restricted Rights" as defined in Clause 252.227-7013 (c) (1) of DFARs. Notwithstanding the foregoing, the authors grant the U.S. Government and others acting in its behalf permission to use and distribute the software in accordance with the terms specified in this license.

Subsequent modifications to the code by the PostgreSQL project follow the same license terms as the rest of PostgreSQL.

PostgreSQL Database Management System
(formerly known as Postgres, then as Postgres95)

Portions Copyright (c) 1996-2017, PostgreSQL Global Development Group

Portions Copyright (c) 1994, The Regents of the University of California

Permission to use, copy, modify, and distribute this software and its documentation for any purpose, without fee, and without a written agreement is hereby granted, provided that the above copyright notice and this paragraph and the following two paragraphs appear in all copies.

IN NO EVENT SHALL THE UNIVERSITY OF CALIFORNIA BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF THE UNIVERSITY OF CALIFORNIA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE UNIVERSITY OF CALIFORNIA SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE UNIVERSITY OF CALIFORNIA HAS NO OBLIGATIONS TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

1.30 postgresql-client-common 42.1.4

1.30.1 Available under license :

Copyright (c) 1997, PostgreSQL Global Development Group
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.31 primeng 5.0.2

1.31.1 Available under license :

```
<?xml version="1.0" encoding="utf-8"?>
<!-- Generator: Adobe Illustrator 15.1.0, SVG Export Plug-In . SVG Version: 6.00 Build 0) -->
<!DOCTYPE svg PUBLIC "-//W3C//DTD SVG 1.1//EN" "http://www.w3.org/Graphics/SVG/1.1/DTD/svg11.dtd">
```

```

<svg version="1.1" id="Layer_1" xmlns="http://www.w3.org/2000/svg"
xmlns:xlink="http://www.w3.org/1999/xlink" x="0px" y="0px"
width="300px" height="300px" viewBox="0 0 300 300" enable-background="new 0 0 300 300"
xml:space="preserve">
<g id="THEMEMARKET">
<g id="YELLOWPANELS">
<g opacity="0.5">
<g>
<g enable-background="new  " >
<defs>
<polygon id="SVGID_1_" enable-background="new  " points="228.336,183.841 228.336,116.156 299.75,109.553
299.75,190.443
"/>
</defs>
<clipPath id="SVGID_2_">
<use xlink:href="#SVGID_1_" overflow="visible"/>
</clipPath>
<g clip-path="url(#SVGID_2_)">
<g>
<g>
<g>
<path fill="#FFD100" d="M289.948,112.603l-54.462,4.763c-0.771,0.067-1.502,0.306-2.166,0.677
c-0.661,0.371-1.255,0.874-1.753,1.474c-0.497,0.599-0.897,1.293-1.175,2.05c-0.276,0.755-0.429,1.573-
0.429,2.417v52.03
c0,0.845,0.152,1.662,0.429,2.417c0.277,0.756,0.678,1.451,1.175,2.05c0.498,0.6,1.092,1.103,1.753,1.474
c0.664,0.371,1.396,0.609,2.166,0.677l54.462,4.763c1.019,0.089,1.993,0.027,2.884-0.313
c0.895-0.288,1.703-0.748,2.385-1.346c0.684-0.599,1.238-1.335,1.623-2.171c0.385-0.838,0.598-1.775,0.598-
2.775v-61.579
c0-1-0.213-1.938-0.598-2.775c-0.385-0.836-0.939-1.572-1.623-2.171c-0.682-0.597-1.49-1.057-2.385-1.345
C291.941,112.63,290.967,112.514,289.948,112.603"/>
<path fill="#404D52" d="M235.486,182.631c-0.771-0.067-1.502-0.306-2.166-0.677c-0.661-0.371-1.255-0.874-
1.753-1.474
c-0.497-0.599-0.897-1.294-1.175-2.05c-0.276-0.755-0.429-1.572-0.429-2.417v-52.03c0-0.845,0.152-1.662,0.429-
2.417
c0.277-0.756,0.678-1.451,1.175-2.05c0.498-0.6,1.092-1.103,1.753-1.474c0.664-0.372,1.396-0.61,2.166-
0.677l54.462-4.763
c1.019-0.089,1.993,0.027,2.884,0.314c0.895,0.288,1.703,0.748,2.385,1.345c0.684,0.599,1.238,1.335,1.623,2.171
c0.385,0.838,0.598,1.776,0.598,2.775v61.579c0,1-0.213,1.938-0.598,2.775c-0.385,0.836-0.939,1.572-1.623,2.171
c-0.682,0.598-1.49,1.058-2.385,1.346c-0.891,0.286-1.865,0.402-2.884,0.313L235.486,182.631 M289.948,110.459
l-54.462,5.036c-1.003,0.092-1.953,0.406-2.813,0.893c-0.856,0.484-1.626,1.139-2.269,1.919
c-0.641,0.777-1.158,1.679-1.516,2.659c-0.355,0.979-0.553,2.038-
0.553,3.133v51.799c0,1.095,0.197,2.153,0.553,3.133
c0.357,0.98,0.875,1.882,1.516,2.658c0.643,0.78,1.412,1.436,2.269,1.92c0.86,0.486,1.811,0.8,2.813,0.893l54.462,5.
035
c1.323,0.123,2.594-0.021,3.757-0.389c1.169-0.37,2.229-0.965,3.123-1.739c0.897-0.778,1.627-1.736,2.133-2.828
c0.508-1.095,0.789-2.321,0.789-3.63v-61.905c0-1.309-0.281-2.535-0.789-3.63c-0.506-1.092-1.235-2.05-2.133-
2.829
c-0.895-0.775-1.954-1.37-3.123-1.739C292.542,110.481,291.271,110.337,289.948,110.459"/>

```

```

    </g>
  </g>
</g>
</g>
</g>
</g>
</g>
</g>
<g opacity="0.5">
  <g>
    <g enable-background="new  ">
      <defs>
        <polygon id="SVGID_3_" enable-background="new  " points="0.247,190.533 0.247,109.463 71.536,116.219
71.536,183.778
        "/>
      </defs>
      <clipPath id="SVGID_4_">
        <use xlink:href="#SVGID_3_" overflow="visible"/>
      </clipPath>
      <g clip-path="url(#SVGID_4_)">
        <g>
          <g>
            <g>
              <path fill="#FFD100" d="M64.425,117.413l-54.368-4.873c-1.02-0.091-1.996,0.023-2.888,0.309
c-0.896,0.287-1.706,0.746-2.389,1.343c-0.686,0.599-1.241,1.335-1.626,2.172c-0.386,0.839-0.6,1.778-
0.6,2.78v61.708
c0,1.002,0.214,1.941,0.6,2.78c0.385,0.838,0.941,1.574,1.626,2.173c0.683,0.597,1.493,1.056,2.389,1.343
c0.892,0.285,1.869,0.399,2.888,0.308l54.368-4.872c0.768-0.069,1.497-0.309,2.158-0.681
c0.658-0.371,1.249-0.874,1.744-1.475c0.493-0.598,0.892-1.292,1.166-2.048c0.274-0.754,0.426-1.57,0.426-2.413v-
51.938
c0-0.843-0.152-1.659-0.426-2.414c-0.274-0.755-0.673-1.45-1.166-2.048c-0.495-0.6-1.085-1.104-1.744-1.475
C65.922,117.721,65.193,117.481,64.425,117.413"/>
            <path fill="#404D52" d="M10.057,187.456c-1.02,0.092-1.996-0.022-2.888-0.308c-0.896-0.287-1.706-0.746-2.389-
1.343
c-0.686-0.599-1.241-1.335-1.626-2.173c-0.386-0.839-0.6-1.778-0.6-2.78v-61.708c0-1.002,0.214-1.941,0.6-2.78
c0.385-0.837,0.941-1.574,1.626-2.172c0.683-0.597,1.493-1.056,2.389-1.343c0.892-0.286,1.869-0.4,2.888-0.309
l54.368,4.873c0.768,0.068,1.497,0.308,2.158,0.68c0.658,0.371,1.249,0.875,1.744,1.475
c0.493,0.598,0.892,1.292,1.166,2.048c0.274,0.754,0.426,1.571,0.426,2.414v51.938c0,0.843-0.152,1.659-
0.426,2.413
c-0.274,0.756-0.673,1.45-1.166,2.048c-0.495,0.601-1.085,1.104-1.744,1.475c-0.661,0.372-1.39,0.611-2.158,0.681
L10.057,187.456 M64.425,115.545l-54.368-5.152c-1.326-0.125-2.597,0.016-3.761,0.382c-1.17,0.368-2.23,0.961-
3.125,1.736
c-0.898,0.778-1.629,1.737-2.135,2.831c-0.508,1.096-0.789,2.324-
0.789,3.636v62.043c0,1.312,0.281,2.54,0.789,3.636
c0.506,1.093,1.236,2.052,2.135,2.83c0.895,0.774,1.955,1.368,3.125,1.736c1.164,0.365,2.436,0.507,3.761,0.381
l54.368-5.151c0.997-0.095,1.943-0.41,2.799-0.897c0.852-0.484,1.617-1.141,2.256-1.92
c0.637-0.776,1.152-1.678,1.506-2.657c0.354-0.978,0.549-2.034,0.549-3.128v-51.703c0-1.093-0.195-2.151-0.549-
3.128
c-0.354-0.979-0.869-1.88-1.506-2.657c-0.64-0.78-1.404-1.436-2.256-

```

```

1.92C66.368,115.954,65.422,115.639,64.425,115.545"/>
  </g>
</g>
</g>
</g>
</g>
</g>
</g>
</g>
<g opacity="0.8">
  <g>
    <g enable-background="new  ">
      <defs>
        <polygon id="SVGID_5_" enable-background="new  " points="162.593,196.947 162.593,103.059 266.059,89.316
266.059,210.69
  "/>
      </defs>
      <clipPath id="SVGID_6_">
        <use xlink:href="#SVGID_5_" overflow="visible"/>
      </clipPath>
      <g clip-path="url(#SVGID_6_)">
        <g>
          <g>
            <g>
              <path fill="#FFD100" d="M250.358,95.825l-77.761,9.549c-0.975,0.12-1.898,0.459-2.735,0.968
c-0.832,0.507-1.58,1.182-2.205,1.979c-0.623,0.794-1.126,1.709-1.473,2.698c-0.347,0.988-0.538,2.052-
0.538,3.146v71.677
c0,1.092,0.191,2.154,0.538,3.141c0.347,0.988,0.85,1.902,1.473,2.696c0.625,0.796,1.373,1.471,2.205,1.978
c0.837,0.509,1.761,0.848,2.735,0.967l77.761,9.548c1.446,0.178,2.834,0.07,4.104-0.276
c1.277-0.349,2.435-0.939,3.411-1.728c0.981-0.792,1.778-1.78,2.331-2.919c0.555-1.141,0.861-2.429,0.861-3.813v-
90.863
c0-1.388-0.307-2.678-0.861-3.82c-0.553-1.14-1.35-2.129-2.331-2.921c-0.977-0.789-2.133-1.381-3.411-1.729
C253.192,95.754,251.805,95.647,250.358,95.825"/>
              <path fill="#404D52" d="M172.598,194.623c-0.975-0.119-1.898-0.458-2.735-0.967c-0.832-0.507-1.58-1.182-
2.205-1.978
c-0.623-0.794-1.126-1.708-1.473-2.696c-0.347-0.986-0.538-2.049-0.538-3.141v-71.677c0-1.095,0.191-
2.159,0.538-3.146
c0.347-0.989,0.85-1.904,1.473-2.698c0.625-0.796,1.373-1.472,2.205-1.979c0.837-0.509,1.761-0.848,2.735-0.968
l77.761-9.549c1.446-0.178,2.834-0.071,4.104,0.276c1.278,0.349,2.435,0.94,3.411,1.729
c0.981,0.792,1.778,1.782,2.331,2.921c0.555,1.142,0.861,2.432,0.861,3.82v90.863c0,1.385-0.307,2.673-0.861,3.813
c-0.553,1.139-1.35,2.127-2.331,2.919c-0.977,0.788-2.134,1.379-3.411,1.728c-1.27,0.347-2.657,0.454-4.104,0.276
L172.598,194.623 M250.358,91.401l-77.761,10.329c-1.412,0.188-2.748,0.691-3.956,1.438
c-1.199,0.742-2.273,1.726-3.171,2.88c-0.894,1.149-1.613,2.47-2.109,3.896c-0.495,1.422-0.769,2.952-
0.769,4.527v71.062
c0,1.572,0.273,3.102,0.769,4.523c0.496,1.426,1.216,2.747,2.109,3.896c0.897,1.155,1.972,2.14,3.171,2.882
c1.208,0.748,2.544,1.253,3.956,1.441l77.761,10.329c2.101,0.278,4.122,0.144,5.978-0.344
c1.87-0.491,3.569-1.341,5.006-2.481c1.446-1.148,2.624-2.589,3.441-4.253c0.82-1.67,1.275-3.559,1.275-
5.591V104.07
c0-2.035-0.455-3.925-1.275-5.595c-0.817-1.664-1.995-3.105-3.441-4.252c-1.437-1.14-3.136-1.988-5.006-2.479

```

```

C254.48,91.257,252.459,91.122,250.358,91.401"/>
</g>
</g>
</g>
</g>
</g>
</g>
</g>
</g>
<g opacity="0.8">
<g>
<g enable-background="new  ">
<defs>
<polygon id="SVGID_7_" enable-background="new  " points="31.159,210.895 31.159,89.112 134.499,103.18
134.499,196.826
"/>
</defs>
<clipPath id="SVGID_8_">
<use xlink:href="#SVGID_7_" overflow="visible"/>
</clipPath>
<g clip-path="url(#SVGID_8_)">
<g>
<g>
<g>
<path fill="#FFD100" d="M124.56,105.464l77.642-9.772c-1.451-0.183-2.843-0.08-4.117,0.264
c-1.282,0.346-2.443,0.936-3.423,1.724c-0.985,0.792-1.785,1.782-2.34,2.923c-0.557,1.144-0.865,2.437-
0.865,3.83v91.142
c0,1.39,0.308,2.681,0.865,3.823c0.555,1.14,1.355,2.129,2.34,2.92c0.98,0.787,2.142,1.377,3.423,1.723
c1.274,0.344,2.667,0.446,4.117,0.264l77.642-9.771c0.968-0.121,1.886-0.462,2.718-0.972
c0.828-0.508,1.57-1.183,2.191-1.979c0.619-0.793,1.119-1.706,1.463-2.692c0.344-0.985,0.534-2.045,0.534-3.136v-
71.504
c0-1.092-0.19-2.154-0.534-3.14c-0.344-0.988-0.844-1.902-1.463-2.695c-0.621-0.796-1.363-1.472-2.191-1.979
C126.446,105.926,125.528,105.586,124.56,105.464"/>
<path fill="#404D52" d="M46.918,204.304c-1.451,0.183-2.843,0.08-4.117-0.264c-1.282-0.346-2.443-0.936-3.423-
1.723
c-0.985-0.791-1.785-1.78-2.34-2.92c-0.557-1.143-0.865-2.434-0.865-3.823v-91.142c0-1.393,0.308-2.686,0.865-
3.83
c0.555-1.141,1.355-2.131,2.34-2.923c0.98-0.788,2.142-1.378,3.423-1.724c1.274-0.344,2.667-0.447,4.117-0.264
l77.642,9.772c0.968,0.122,1.886,0.462,2.718,0.973c0.828,0.507,1.57,1.183,2.191,1.979
c0.619,0.793,1.119,1.707,1.463,2.695c0.344,0.986,0.534,2.048,0.534,3.14v71.504c0,1.091-0.19,2.15-0.534,3.136
c-0.344,0.986-0.844,1.899-1.463,2.692c-0.621,0.796-1.363,1.471-2.191,1.979c-0.832,0.51-1.75,0.851-2.718,0.972
L46.918,204.304 M124.56,101.827L46.918,91.258c-2.107-0.287-4.135-0.159-5.997,0.322c-1.877,0.486-
3.583,1.331-5.026,2.47
c-1.452,1.146-2.635,2.588-3.456,4.255c-0.824,1.673-1.281,3.568-
1.281,5.61v92.175c0,2.039,0.457,3.933,1.281,5.605
c0.821,1.667,2.003,3.109,3.456,4.256c1.443,1.14,3.148,1.986,5.026,2.473c1.862,0.482,3.89,0.61,5.997,0.324l77.64
2-10.57
c1.403-0.19,2.731-0.697,3.931-1.447c1.192-0.744,2.259-1.729,3.151-2.884c0.887-1.148,1.602-2.469,2.095-3.892
c0.491-1.419,0.763-2.945,0.763-4.514v-70.879c0-1.57-0.271-3.097-0.763-4.517c-0.493-1.424-1.208-2.743-2.095-

```

3.892

```
c-0.892-1.154-1.959-2.138-3.151-2.882C127.291,102.525,125.963,102.019,124.56,101.827"/>
</g>
</g>
</g>
</g>
</g>
</g>
</g>
</g>
<path fill="#FFD100" stroke="#404D52" stroke-width="7" stroke-miterlimit="10" d="M222.064,206.734
c0,8.501-6.891,15.391-15.39,15.391H93.208c-8.501,0-15.393-6.89-15.393-15.391V93.267c0-8.5,6.892-
15.392,15.393-15.392h113.467
c8.499,0,15.39,6.891,15.39,15.392V206.734z"/>
</g>
<g id="IRISH">
<path fill="#404C51" d="M149.938,209.013c-32.537,0-59.007-26.472-59.007-59.009c0-32.542,26.47-
59.015,59.007-59.015
c32.54,0,59.013,26.473,59.013,59.015C208.95,182.541,182.478,209.013,149.938,209.013z M149.938,93.092
c-31.378,0-56.9,25.53-56.9,56.911c0,31.378,25.522,56.903,56.9,56.903c31.382,0,56.907-25.524,56.907-56.903
C206.845,118.623,181.319,93.092,149.938,93.092z"/>
<path fill="#26A9E0" d="M136.871,150.001c0,7.222,5.854,13.069,13.069,13.069c7.219,0,13.07-5.848,13.07-
13.069
c0-7.219-5.852-13.07-13.07-13.07C142.726,136.931,136.871,142.782,136.871,150.001z"/>
<polygon fill="#404C51" points="149.94,133.093 155.341,123.568 165.295,118.179 164.428,117.676
152.646,120.509
149.238,132.255 "/>
<polygon fill="#404C51" points="149.905,166.906 144.507,176.432 134.551,181.819 135.417,182.321
147.2,179.493 150.607,167.748
"/>
<polygon fill="#404C51" points="166.83,150.018 176.355,155.416 181.744,165.374 182.247,164.508
179.417,152.724
167.668,149.316 "/>
<polygon fill="#404C51" points="133.018,149.983 123.492,144.582 118.103,134.628 117.6,135.496
120.429,147.278 132.176,150.686
"/>
<polygon fill="#404C51" points="161.864,161.968 164.784,172.521 161.553,183.372 162.522,183.112
168.852,172.779
162.954,162.065 "/>
<polygon fill="#404C51" points="137.979,138.034 135.061,127.481 138.292,116.629 137.321,116.888
130.994,127.222
136.89,137.936 "/>
<polygon fill="#404C51" points="137.959,161.943 127.404,164.862 116.555,161.633 116.812,162.602
127.146,168.93
137.859,163.034 "/>
<polygon fill="#404C51" points="161.893,138.06 172.444,135.141 183.298,138.371 183.037,137.403
172.706,131.073
161.991,136.969 "/>
<polygon fill="#404C51" points="134.271,156.387 123.409,154.998 114.652,147.823 114.516,148.817
```

```

121.597,158.65
  133.758,157.357  "/>
<polygon fill="#404C51" points="165.576,143.616 176.439,145.004 185.196,152.179 185.336,151.184
178.252,141.354
  166.09,142.648  "/>
<polygon fill="#404C51" points="134.328,143.479 127.614,134.826 126.474,123.563 125.678,124.172
123.752,136.135
  133.282,143.802  "/>
<polygon fill="#404C51" points="165.521,156.527 172.234,165.176 173.374,176.439 174.174,175.83
176.098,163.866 166.566,156.2
  "/>
<polygon fill="#404C51" points="143.493,134.367 144.854,123.501 152.003,114.722 151.008,114.589
141.194,121.698
  142.524,133.854  "/>
<polygon fill="#404C51" points="156.356,165.637 154.995,176.502 147.849,185.281 148.843,185.413
158.655,178.303
  157.323,166.145  "/>
<polygon fill="#404C51" points="156.58,134.461 165.291,127.823 176.562,126.778 175.963,125.976
164.015,123.95 156.265,133.414
  "/>
<polygon fill="#404C51" points="143.266,165.541 134.556,172.181 123.285,173.223 123.885,174.026
135.832,176.055 143.58,166.59
  "/>
<polygon fill="#404D52" points="141.194,118.316 155.113,108.727 149.938,95.646 150.607,106.982
141.194,115.986  "/>
<polygon fill="#404D52" points="159.499,181.685 145.579,191.276 150.753,204.354 150.083,193.021
159.499,184.015  "/>
<polygon fill="#404D52" points="182.031,140.849 191.623,154.767 204.699,149.594 193.366,150.263
184.36,140.849  "/>
<polygon fill="#404D52" points="118.662,159.151 109.071,145.233 95.993,150.408 107.326,149.737
116.333,159.151  "/>
<polygon fill="#404D52" points="179.22,165.933 176.161,182.558 189.067,188.146 180.581,180.607
180.867,167.582  "/>
<polygon fill="#404D52" points="121.47,134.068 124.53,117.445 111.623,111.856 120.111,119.396
119.821,132.422  "/>
<polygon fill="#404D52" points="134.415,178.878 117.791,175.818 112.201,188.725 119.743,180.235
132.767,180.525  "/>
<polygon fill="#404D52" points="166.282,121.126 182.905,124.188 188.492,111.282 180.951,119.768
167.93,119.48  "/>
<polygon fill="#404D52" points="124.35,170.296 110.266,160.946 100.055,170.616 110.323,165.775
122.188,171.16  "/>
<polygon fill="#404D52" points="176.348,129.711 190.434,139.057 200.644,129.386 190.372,134.228
178.508,128.845  "/>
<polygon fill="#404D52" points="117.493,147.149 113.55,130.713 99.485,130.837 110.302,134.288
115.32,146.311  "/>
<polygon fill="#404D52" points="183.206,152.856 187.151,169.289 201.215,169.168 190.397,165.716
185.379,153.692  "/>
<polygon fill="#404D52" points="129.102,124.776 137.92,110.356 127.875,100.511 133.096,110.592

```



```
128.157,122.648 "/>
<polygon fill="#404D52" points="171.595,175.229 162.782,189.649 172.825,199.491 167.605,189.408
172.544,177.354 "/>
<polygon fill="#404D52" points="154.258,117.252 170.812,113.842 171.141,99.782 167.343,110.481
155.165,115.109 "/>
<polygon fill="#404D52" points="146.442,182.749 129.888,186.164 129.561,200.225 133.357,189.525
145.534,184.895 "/>
</g>
</g>
</svg>
```

The MIT License (MIT)

Copyright (c) 2016-2017 PrimeTek

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.32 PyGreSQL 5.0.4

1.32.1 Available under license :

Written by D'Arcy J.M. Cain (darcy@druid.net)

Based heavily on code written by Pascal Andre (andre@chimay.via.ecp.fr)

Copyright (c) 1995, Pascal Andre

Further modifications copyright (c) 1997-2008 by D'Arcy J.M. Cain (darcy@PyGreSQL.org)

Further modifications copyright (c) 2009-2016 by the PyGreSQL team.

Permission to use, copy, modify, and distribute this software and its

documentation for any purpose, without fee, and without a written agreement is hereby granted, provided that the above copyright notice and this paragraph and the following two paragraphs appear in all copies. In this license the term "AUTHORS" refers to anyone who has contributed code to PyGreSQL.

IN NO EVENT SHALL THE AUTHORS BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF AUTHORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE AUTHORS SPECIFICALLY DISCLAIM ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE AUTHORS HAVE NO OBLIGATIONS TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

Copyright notice

=====

Written by D'Arcy J.M. Cain (darcy@druid.net)

Based heavily on code written by Pascal Andre (andre@chimay.via.ecp.fr)

Copyright (c) 1995, Pascal Andre

Further modifications copyright (c) 1997-2008 by D'Arcy J.M. Cain (darcy@PyGreSQL.org)

Further modifications copyright (c) 2009-2016 by the PyGreSQL team.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose, without fee, and without a written agreement is hereby granted, provided that the above copyright notice and this paragraph and the following two paragraphs appear in all copies. In this license the term "AUTHORS" refers to anyone who has contributed code to PyGreSQL.

IN NO EVENT SHALL THE AUTHORS BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF AUTHORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE AUTHORS SPECIFICALLY DISCLAIM ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE AUTHORS HAVE NO OBLIGATIONS TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

1.33 reflections 0.9.10

1.33.1 Available under license :

DO WHAT THE FUCK YOU WANT TO PUBLIC LICENSE

Version 2, December 2004

Copyright (C) 2004 Sam Hocevar <sam@hocevar.net>

Everyone is permitted to copy and distribute verbatim or modified copies of this license document, and changing it is allowed as long as the name is changed.

DO WHAT THE FUCK YOU WANT TO PUBLIC LICENSE
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. You just DO WHAT THE FUCK YOU WANT TO.

1.34 rxjs 5.5.2

1.34.1 Available under license :

```
var fs = require('fs');
var dist = require('minimist')(process.argv).dist;
var license = require('minimist')(process.argv).license;

function addLicenseToFile (license, destination) {
  if (!license) {
    throw new Error('license path is required as 1st argument');
  }

  addLicenseTextToFile(fs.readFileSync(license).toString(), destination);
}

function addLicenseTextToFile(licenseText, destination) {
  if (!destination) {
    throw new Error('destination file path is required as 2nd argument');
  }

  fs.writeFileSync(destination, `/**
  @license
  ${licenseText}
  **/
  ${fs.readFileSync(`${destination}`).toString()}
`);
}
```

```
module.exports = {  
  addLicenseToFile: addLicenseToFile,  
  addLicenseTextToFile: addLicenseTextToFile  
};
```

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain

separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the

origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright (c) 2015-2017 Google, Inc., Netflix, Inc., Microsoft Corp. and contributors

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

1.35 slf4j-api 1.7.24

1.36 slf4j-log4j12 1.7.24

1.36.1 Available under license :

MIT License

SPDX short identifier: MIT

Copyright <YEAR> <COPYRIGHT HOLDER>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.37 spring-boot-starter-data-jpa

1.5.2.RELEASE

1.38 spring-boot-starter-data-rest 1.5.2 RELEASE

1.39 spring-boot-starter-jdbc 1.5.2 RELEASE

1.40 spring-boot-starter-security 1.5.2 RELEASE

1.40.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation

source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable

(except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and

may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify,

defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.41 spring-boot-starter-web 1.5.2 RELEASE

1.41.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by

the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
 - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained

within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. **Limitation of Liability.** In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be

liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.42 spring-web 4.3.7.RELEASE

1.42.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes

of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You

meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor,

except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

1.43 tcpdump 4.9.2 :0ubuntu0.16.04.1

1.43.1 Available under license :

This package was debianized by Anand Kumria <wildfire@progsoc.org> on
Wed, 22 Nov 2000 13:19:33 +1100, then maintained by Torsten Landschoff
<torsten@debian.org> and Romain Francoise <rfrancoise@debian.org>.

It was downloaded from <http://www.tcpdump.org/>

Upstream Authors: tcpdump-workers@tcpdump.org

Licensed under the 3-clause BSD license:

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:

1. Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in
the documentation and/or other materials provided with the
distribution.
3. The names of the authors may not be used to endorse or promote
products derived from this software without specific prior
written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR
IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED
WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some files in this package are licensed under the 4-clause BSD license,

the copyright on most of them belongs to The Regents of the University of California. Since the license was retroactively changed in 1999 to remove the advertising clause, they are effectively under the 3-clause license even if the text of the license in the files hasn't been updated. See the following document for more details:

<URL: <ftp://ftp.cs.berkeley.edu/pub/4bsd/README.Impt.License.Change>>

Other files under the 4-clause BSD license and whose copyright doesn't belong to the The Regents of the University of California are listed below:

- aadv.h, Copyright (c) 2003 Bruce M. Simpson
- atmuni31.h, Copyright (c) 1997 Yen Yen Lim and North Dakota State University
- ieee802_11.h, Copyright (c) 2001 Fortress Technologies and Charlie Lenahan
- print-802_11.c, Copyright (c) 2001 Fortress Technologies and Charlie Lenahan
- print-aadv.c, Copyright (c) 2003 Bruce M. Simpson
- print-ascii.c, Copyright (c) 1997, 1998 The NetBSD Foundation, Inc.
- print-cnfp.c, Copyright (c) 1998 Michael Shalayeff
- print-gre.c, Copyright (c) 2002 Jason L. Wright
- print-mobile.c, Copyright (c) 1998 The NetBSD Foundation, Inc.
- print-sunatm.c, Copyright (c) 1997 Yen Yen Lim and North Dakota State University
- print-telnet.c, Copyright (c) 1997, 1998 The NetBSD Foundation, Inc.
- print-timed.c, Copyright (c) 2000 Ben Smithurst
- missing/inet_aton.c, Copyright (c) 1995, 1996, 1997 Kungliga Tekniska Hgskolan (Royal Institute of Technology, Stockholm, Sweden).
- missing/inet_ntop.c, Copyright (c) 1995, 1996, 1997 Kungliga Tekniska Hgskolan (Royal Institute of Technology, Stockholm, Sweden).
- missing/inet_pton.c, Copyright (c) 1995, 1996, 1997 Kungliga Tekniska Hgskolan (Royal Institute of Technology, Stockholm, Sweden).

Current upstream maintainers:

Bill Fenner <fenner@research.att.com>
Fulvio Risso <risso@polito.it>
Guy Harris <guy@alum.mit.edu>
Hannes Gredler <hannes@juniper.net>
Jun-ichiro itojun Hagino <itojun@ijlab.net>
Michael Richardson <mcr@sandelman.ottawa.on.ca>

Additional people who have contributed patches:

Alan Bawden <Alan@LCS.MIT.EDU>
Alexey Kuznetsov <kuznet@ms2.inr.ac.ru>
Albert Chin <china@thewrittenword.com>
Andrew Brown <atatat@atatdot.net>

Antti Kantee <pooka@netbsd.org>
Arkadiusz Miskiewicz <misiej@pld.org.pl>
Armando L. Caro Jr. <acaro@mail.eecis.udel.edu>
Assar Westerlund <assar@sics.se>
Brian Ginsbach <ginsbach@cray.com>
Charles M. Hannum <mycroft@netbsd.org>
Chris G. Demetriou <cgd@netbsd.org>
Chris Pepper <pepper@mail.reppep.com>
Darren Reed <darrenr@reed.wattle.id.au>
David Kaelbling <drk@sgi.com>
David Young <dyoung@ojctech.com>
Don Ebright <Don.Ebright@compuware.com>
Eric Anderson <anderse@hpl.hp.com>
Franz Schaefer <schaefer@mond.at>
Gianluca Varenni <varenni@netgroup-serv.polito.it>
Gisle Vanem <giva@bgnett.no>
Graeme Hewson <ghewson@cix.compulink.co.uk>
Greg Stark <gsstark@mit.edu>
Greg Troxel <gdt@ir.bbn.com>
Guillaume Pelat <endymion_@users.sourceforge.net>
Hyung Sik Yoon <hsyn@kr.ibm.com>
Igor Khristophorov <igor@atdot.org>
Jan-Philip Velders <jpv@veldersjes.net>
Jason R. Thorpe <thorpej@netbsd.org>
Javier Achirica <achirica@ttd.net>
Jean Tourrilhes <jt@hpl.hp.com>
Jefferson Ogata <jogata@nodc.noaa.gov>
Jesper Peterson <jesper@endace.com>
John Bankier <jbankier@rainfinity.com>
Jon Lindgren <jonl@yubyub.net>
Juergen Schoenwaelder <schoenw@ibr.cs.tu-bs.de>
Kazushi Sugyo <sugyo@pb.jp.nec.com>
Klaus Klein <kleink@netbsd.org>
Koryn Grant <koryn@endace.com>
Krzysztof Halasa <khc@pm.waw.pl>
Lorenzo Cavallaro <sullivan@sikurezza.org>
Loris Degioanni <loris@netgroup-serv.polito.it>
Love Hrnquist-strand <lha@stacken.kth.se>
Maciej W. Rozycki <macro@ds2.pg.gda.pl>
Marcus Felipe Pereira <marcus@task.com.br>
Martin Husemann <martin@netbsd.org>
Mike Wiacek <mike@iroot.net>
Monroe Williams <monroe@pobox.com>
Octavian Cerna <tavy@ylabs.com>
Olaf Kirch <okir@caldera.de>
Onno van der Linden <onno@simplex.nl>
Paul Mundt <lethal@linux-sh.org>
Pavel Kankovsky <kan@dcit.cz>

Peter Fales <peter@fales-lorenz.net>
Peter Jeremy <peter.jeremy@alcatel.com.au>
Phil Wood <cpw@lanl.gov>
Rafal Maszkowski <rzmm@icm.edu.pl>
Rick Jones <raj@cup.hp.com>
Scott Barron <sb125499@ohiou.edu>
Scott Gifford <sgifford@tir.com>
Sebastian Krahmer <krahmer@cs.uni-potsdam.de>
Shaun Clowes <delius@progsoc.uts.edu.au>
Solomon Peachy <pizza@shaftnet.org>
Stefan Hudson <hudson@mbay.net>
Takashi Yamamoto <yamt@mwd.biglobe.ne.jp>
Tony Li <tli@procket.com>
Torsten Landschoff <torsten@debian.org>
Uns LIDER <unslider@miranda.org>
Uwe Girlich <Uwe.Girlich@philosys.de>
Xianjie Zhang <xzhang@cup.hp.com>
Yen Yen Lim
Yoann Vandoorselaere <yoann@prelude-ids.org>

The original LBL crew:

Steve McCanne

Craig Leres

Van Jacobson

License: BSD

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

1.44 zone.js 0.8.16

1.44.1 Available under license :

/**

@license

The MIT License

Copyright (c) 2016 Google, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

*/

The MIT License

Copyright (c) 2016 Google, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

©2019 Cisco Systems, Inc. All rights reserved.