



Interplay[®] Central

Installation and Configuration Guide

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Using This Guide

This guide is intended for all Avid® Interplay® Central administrators who are responsible for installing and configuring an Avid Interplay Central system. This guide describes product set up and configuration procedures related to core components and some third-party hardware or software, such as load balancers used in high availability set-ups.

For initial administration and maintenance, see the *Avid Interplay Central Administration Guide*.

Symbols and Conventions

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Symbol or Convention	Meaning or Action
	A note provides important related information, reminders, recommendations, and strong suggestions.
	A caution means that a specific action you take could cause harm to your computer or cause you to lose data.
	A warning describes an action that could cause you physical harm. Follow the guidelines in this document or on the unit itself when handling electrical equipment.
>	This symbol indicates menu commands (and subcommands) in the order you select them. For example, File > Import means to open the File menu and then select the Import command.
▶	This symbol indicates a single-step procedure. Multiple arrows in a list indicate that you perform one of the actions listed.
(Windows), (Windows only), (Macintosh), or (Macintosh only)	This text indicates that the information applies only to the specified operating system, either Windows or Macintosh OS X.
Bold font	Bold font is primarily used in task instructions to identify user interface items and keyboard sequences.
<i>Italic font</i>	Italic font is used to emphasize certain words and to indicate variables.

Symbol or Convention	Meaning or Action
Courier Bold font	Courier Bold font identifies text that you type.
Ctrl+key or mouse action	Press and hold the first key while you press the last key or perform the mouse action. For example, Command+Option+C or Ctrl+drag.

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1 Getting Started

Interplay Central requires a minimum of two servers, one used as a Web application server, and the other as the playback server. Avid can supply the server hardware or the customer can supply their own hardware as long as it meets the minimum specifications outlined by Avid.

The following main topics describe the components and software available for an Interplay Central system as well as important, initial preparation for setting up your system.

- [System Components](#)
- [System Setup Tasks](#)
- [Checklist: Before You Begin](#)
- [Gather Site Information](#)
- [Licensing Requirements and Setup](#)
- [Setting up the Load Balancer](#)

System Components

Your Avid Interplay Central system may include some or all of the following:

- **Interplay Central Middleware Server**—the Web application server used for hosting the Web pages, and handling all communications to and from APIs of other Avid products.
- **Interplay Central Playback Server**—the server that runs the Interplay Central Playback service. It concurrently reads multiple media assets and sequences residing on an ISIS, and compresses that media for playback on internet-connected clients. In an Interplay Central system, a site can “cluster” multiple ICP servers to scale horizontally.



Load balancers are also recommended for sites with multiple middleware and playback servers. For middleware servers, a hardware load balancer is used for fault tolerance only. For playback servers, a software load balancer distributes user connections, which results in CPU balancing.

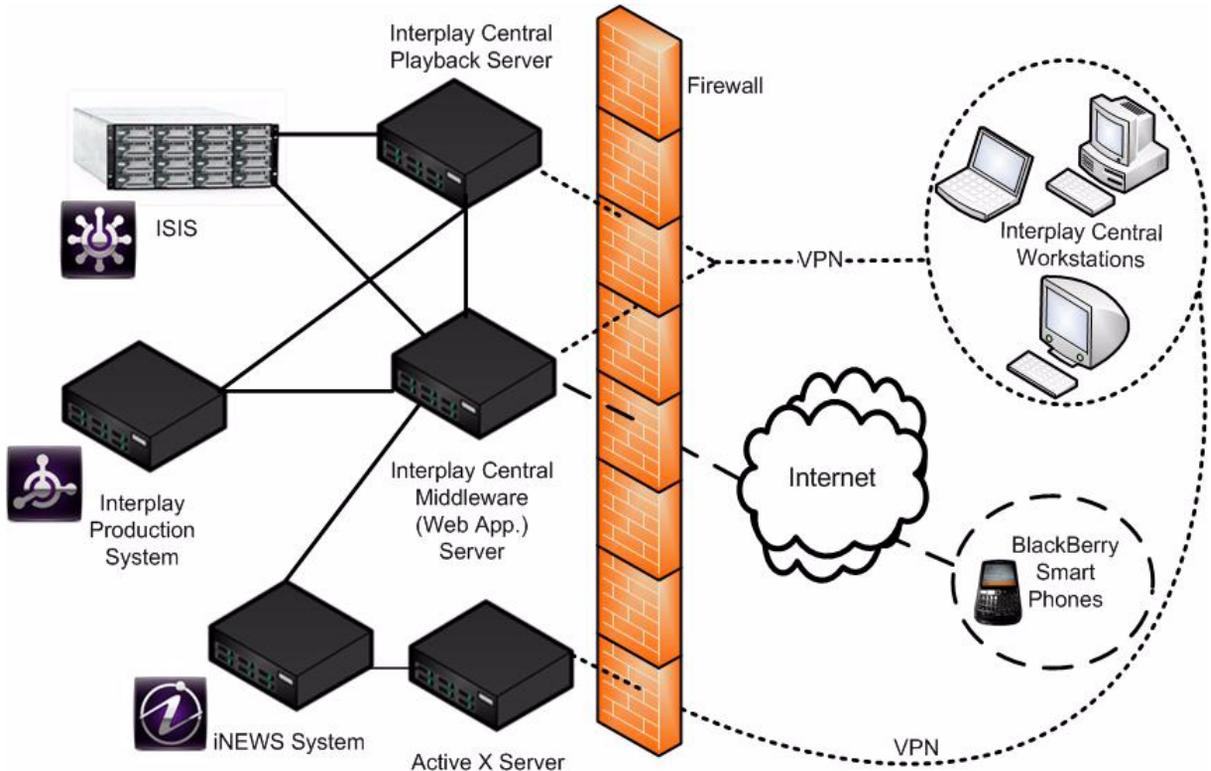
- **Interplay Central Workstation**—the Web-based client that communicates with the Interplay Central middleware server, the Interplay Central playback server, and other servers for MOS integration. A workstation can be a Windows-based personal computer or laptop running a browser such as Google Chrome, or any Apple computer with a Macintosh operating system and the Safari browser.



For current specifications regarding minimum requirements and version compatibility, see the latest ReadMe provided by Avid with your product.

- **Modules**—software applications that provide functionality and connectivity to various systems. An example of a module is the Interplay Central mobile application, installed on Blackberry smart phones.
- **Avid iNEWS newsroom computer system**—a back-end system that provides journalists, producers, directors, and various technical personnel in the newsroom with an array of tools to make their job easier. It is primarily made up of iNEWS Workstations, linked together via a local or wide area network, and the iNEWS Server(s), which manages all the day-to-day activities of the newsroom.
- **Avid Interplay Production system**—a back-end system that combines an asset database with workflow management software, both of which are integrated with Avid shared storage and Avid archive solutions. Interplay Production provides tools that let journalists and producers add rich media to stories and send the assembled video sequence to a playout server.
- **ISIS 7000**—An Avid shared storage server.

The following diagram illustrates a basic sampling of components within an Interplay Central system, including an optional Active X server, such as a server running the DekoMOS Gateway service. Your site might have more components not depicted in this illustration.



For the best performance, Avid recommends the middleware server(s) be located in Zone 3 on the network, closest to the workstations and mobile devices. The playback server(s) can be in Zone 1 with a direct connection (10GigE or 1GigE) to ISIS or in Zone 2, connected to the ISIS through a switch.

Interplay Central Middleware Server

Avid offers the AS3000 as the Web application server known as the Interplay Central middleware server. The middleware server could also be procured separately from a third-party vendor, such as an HP DL360, running Microsoft Server technology.



For the most current Avid Interplay Central system hardware and software specifications, see the system requirements listed online at www.avid.com for the Avid Interplay Central system, or contact your Avid Sales representative.

The middleware server runs the following services:

- Interplay Central service
- Interplay Central User Manager service
- Interplay Central Distribution service
- Send to Playback service (STP)
- Avid Service Framework (ASF)

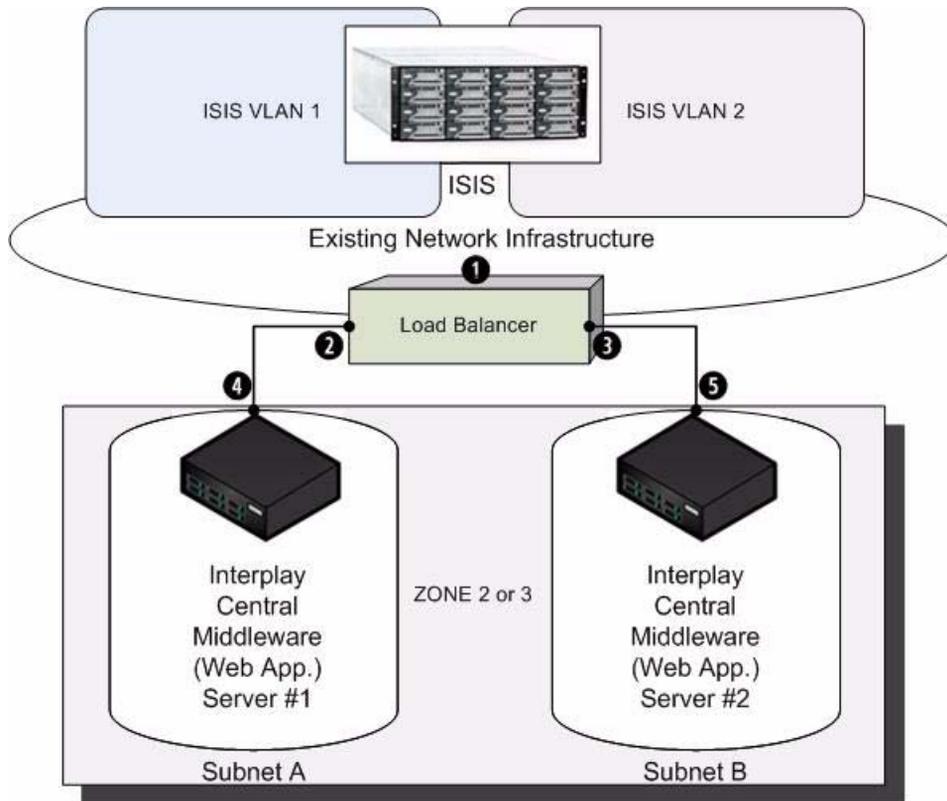


If the middleware server has Internet Information Services (IIS) installed, ensure that it is disabled so there is no port usage conflict.

Load Balancing Dual-Server Systems

Avid recommends running Interplay Central Server service on two identically configured Interplay Central middleware servers to help ensure high availability and failover protection. High availability is achieved by using a load balancer, such as the LoadMaster 2200 by Kemp Technologies, which monitors the health of the servers and provides failover functionality in case one of the servers or its services goes down.

With a dual-server system, the Interplay Central middleware servers are directly connected to the load balancer and set up to run in their own subnets. The load balancer acts like a router between the existing network and each middleware server's subnet.



Each Interplay Central middleware server gets its own IP address in its subnet—shown as numbers 4 and 5 in the previous diagram. During the hardware installation, the load balancer is assigned multiple IP addresses:

1. An IP address facing the network
2. An IP address facing the middleware server in subnet A
3. An IP address facing the middleware server in subnet B

Plus, it gets one *virtual* IP address (not numbered in the diagram) that is used by the clients to access Interplay Central. The load balancer will route client requests from the virtual IP address to one of the Interplay Central middleware servers and send responses from the middleware servers back to the clients. All client traffic is handled and balanced by the load balancer. Interplay Central clients are not allowed to connect from the servers' subnets.

Procedures for installing and configuring your load balancer could vary, so Avid recommends referring to the documentation provided by the hardware manufacturer. However, as an example, steps for setting up the LoadMaster 2200, manufactured by Kemp Technologies, is provided in this guide. For more information, see [“Setting up the Load Balancer” on page 28](#).

Interplay Central Playback Server

The Interplay Central Playback Service software is installed on an HP DL380G7 server (procured separately) running the Red Hat Enterprise Linux operating system. Additionally, this HP server requires specific GigE and/or 10GigE network interface cards to support ISIS storage connectivity.

It runs the following:

- Interplay Central playback service



For the most current Avid Interplay Central system hardware and software specifications, see the system requirements listed online at www.avid.com for the Avid Interplay Central system, or contact your Avid Sales representative.

Modules

An Interplay Central module contains front-end elements or both front-end and back-end elements. Front-end elements can include the panes or controls that integrate with existing panes in the user interface. The back-end elements can include services, connectivity to back-end systems, or both.

For instance, the Interplay Central Mobile module is not the same thing as the iNEWS client software, but like the iNEWS client software, this module provides iNEWS functionality as well as connectivity to iNEWS systems.

Some modules are installed on servers while others run on clients, and third-party developers can create Interplay Central modules for increased functionality.

The following is a list of some modules offered by Avid for Interplay Central systems:

- Interplay Central Module
- Avid Service Framework Module
- iNEWS API Module
- iNEWS Module
- Interplay Central Mobile Module

Interplay Central Workstation

The Interplay Central Workstation communicates with the iNEWS server and the Interplay Workgroup database through the Interplay Central servers. It can be a computer or laptop, running a Windows-based or Macintosh-based operating system, located within a site's firewall

or securely connected to the network through VPN. There is no special software to install, but the computer must have a supported Web browser, such as Google Chrome for Windows or Safari for a Macintosh computer.

System Setup Tasks

The following table is provided as a convenient checklist to ensure a complete and successful installation of an integrated Interplay Central system. You can print this page to use as a guide during the installation and configuration process.

<input checked="" type="checkbox"/> Tasks	Refer to...
<input type="checkbox"/> Complete all pre-installation tasks.	“Checklist: Before You Begin” on page 21
<input type="checkbox"/> Set up the Interplay Central middleware server(s).	“Checklist: Set up Interplay Central Middleware Server” on page 32
<input type="checkbox"/> Configure the Interplay Central middleware server(s).	“Checklist: Configure Interplay Central Middleware Server” on page 46
<input type="checkbox"/> Set up and configure the Interplay Central playback server(s).	“Checklist: Set up Interplay Central Playback Server” on page 59
<input type="checkbox"/> Configure the Interplay Administration settings used by Interplay Central.	“Configuring the Application Database Settings” on page 54
<input type="checkbox"/> Configure the system for send to playback (STP).	<i>The Avid Interplay Central Administration Guide</i>
 <i>An Interplay Production Transcode Server is required for STP and Mixdown. The audio transitions/effects will be rendered by the transcode service in preparation for STP, and sequences will be flattened by the transcode service during a mixdown operation.</i>	
<input type="checkbox"/> (Optional) Install and configure devices for mobile integration.	“The Mobile Application” on page 77
<input type="checkbox"/> (Optional) Install and configure active-X plug-ins.	The documentation that came with your plug-in

Checklist: Before You Begin

Before you start to install software and configure the Avid Interplay Central server(s), ensure the following tasks are completed.

☒	Tasks	Refer to...
☐	Gather all site information needed during the setup, installation, and configuration processes.	“Gather Site Information” on page 22
☐	For dual-server sites, install and configure the load balancer for the middleware servers.	The manufacturer’s documentation that came with your load balancer, such as the Quick Start Guide for the LoadMaster 2200 by Kemp Technologies. See also “Load Balancing Dual-Server Systems” on page 17.
☐	Configure iNEWS for licensed integration with Interplay Central.	<ul style="list-style-type: none"> • “Verifying Interplay Central Licenses on iNEWS” on page 24 • “Configure iNEWS for Integration with Interplay Central” on page 26
☐	Install the Interplay Production license for Interplay Central	“Installing the Interplay Production License for Interplay Central” on page 23

Gather Site Information

Prior to installing Avid Interplay Central, collect the following information and keep it readily available for use during the process. For convenience, you can print the following table and fill in the information unique to your site.

Type of Information Needed	Site Specific Notes
Interplay Workgroup name	
Interplay Workgroup Lookup services (fully qualified domain names)	
ISIS virtual & real hostnames	
Interplay/ISIS administrator account and password	
iNEWS Server name(s)	
iNEWS user account	
Interplay Workgroup Media Indexer HAG name	
Media Services hostname	
Transcode hostname	
STP Encode hostname	
IP address(es) of Interplay Central middleware and playback servers	
IP address(es) of load balancer(s) for dual-server systems	

Licensing Requirements and Setup

An Interplay Central user requires at least one of the following licenses:

- Interplay Central mobile license: This license allows the user to connect to an iNEWS newsroom computer system through the Interplay Central mobile application.
- iNEWS client license. This license allows the user to connect to an iNEWS newsroom computer system through the Interplay Central middleware server, but does not allow access to an Interplay Production database.
- Interplay Central browse client license: This license includes both an iNEWS client license and an Interplay Production license. The Interplay Production license (J type) allows browsing of media stored in an Interplay Production database.
- Interplay Central full client license: This license includes both an iNEWS client license and an Interplay Production license. The Interplay Production license (G type) allows both browsing of an Interplay Production database and creation of sequences using that media.

Delivery of Licenses on Back-End Systems

An iNEWS client license or an Interplay Central mobile license for a specified number of clients is sent to the customer through email along with specific installation instructions. However, to ensure proper licensed integration between Interplay Central and iNEWS, additional modification to system files in the iNEWS database is also required. For more information on those modification procedures, see [“Verifying Interplay Central Licenses on iNEWS” on page 24](#), [“Editing SYSTEM.CLIENT.VERSIONS” on page 26](#), and [“Editing SYSTEM.CLIENT.WINDOWS” on page 27](#).

An Interplay Production license for a specified number of clients is supplied to the customer on a USB flash drive as a file with the extension nxn. For more information, see [“Installing the Interplay Production License for Interplay Central” on page 23](#).

Configuration on the Front-End

You specify the type of license for each Interplay Central user in the Details tab of the Users layout. For more information, see [“Creating a New User or Editing User Details” on page 42](#).

Installing the Interplay Production License for Interplay Central

The Avid Interplay Administrator is a client application that can be installed on any computer in your network and then used to manage either the Interplay Engine or the Interplay Archive Engine. You can use the Licenses view of the Interplay Administrator to install the Interplay Production license needed for integration with Interplay Central. For more information about this application, see the *Avid Interplay Engine and Avid Interplay Archive Engine Administrator’s Guide*.

To install the Interplay Production license for Interplay Central:

1. Start and log in to the Interplay Administrator.
2. Make a folder for the license file on the root directory (C:\) of the Interplay Central middleware server. For example:

```
C:\Interplay_Licenses
```
3. Insert the USB flash drive into any USB port.
If the USB flash drive does not automatically display:
 - a. Double-click the computer icon on the desktop.
 - b. Double-click the USB flash drive icon to open it.
4. Copy the license file (*.nxn) into the new folder you created.
5. In the Server section of the Interplay Administrator window, click the Licenses icon.
6. Click the Import License button.
7. Select the file and click Open. The type of licenses (J or G) are displayed in the License Types area.

Verifying Interplay Central Licenses on iNEWS

Before you can use Interplay Central to connect to any back-end system, such as an iNEWS newsroom computer system, you must ensure iNEWS is configured with the proper number of Interplay Central devices authorized to connect to the system based on the purchased licenses. You can view iNEWS licensing limits from the iNEWS console.

To display iNEWS licensing limits, at the console, type:

▶ `NRCS-A$ status license`

A message similar to the following will appear on your screen:

```
A is ONLINE and has been CONFIGURED. ID is INWS.
```

```
System is AB. Master is A.
```

```
Disk status is OK. The database is OPEN.
```

```
Site Key..... : 009999
```

```
CPUs..... : 3
```

```
Workstation addresses : 3000
```

```
Workstation resources : 1000
```

```
COM resources..... : 5
```

```
Web Access resources. : 2
```

```
Web Client resources. : 10
```

```
Web API resources.... : 5
```

```
Wire Server resources : 8
```

```
Instinct resources... : 10
```

```
Mobile devices allowed: 2000
```

```
Community Sessions... : allowed.
```

The three lines to pay attention to are:

- Workstation addresses—indicates how many IP and/or MAC addresses can be specified in the SYSTEM.CLIENT.WINDOWS story. This story may be deleted from the iNEWS database if Workstation addresses shows a “site” license and IP-specific restriction is not wanted.
- Workstation resources—the number of clients that can simultaneously connect to iNEWS, including both iNEWS workstations and Interplay Central workstations.
- Mobile devices allowed—the number of mobile devices that can simultaneously connect to iNEWS.



Any time the iNEWS newsroom computer system is configured, your licensing information is checked. An error message appears in iNEWS if the configuration file defines more devices than are licensed.

To change license allowances:

- ▶ Contact an Avid sales representative.

Configure iNEWS for Integration with Interplay Central

Before you can connect to an iNEWS newsroom computer system from an Interplay Central workstation, you must edit a couple of system files in iNEWS so that iNEWS recognizes Interplay Central as a properly licensed device.

The files to edit are:

- SYSTEM.CLIENT.VERSIONS
- SYSTEM.CLIENT.WINDOWS



Additional files must be edited to ensure proper licensing for iNEWS integration with the Interplay Central mobile application. For more information, see “iNEWS Configuration for Mobile Integration” on page 79.

Editing SYSTEM.CLIENT.VERSIONS

Some steps in the following procedure are conducted at the iNEWS console in superuser mode. For more information, see “The iNEWS Console” chapter in the *iNEWS Installation and Configuration Guide*.

To edit the SYSTEM.CLIENT.VERSIONS story in iNEWS:

1. Sign in to an iNEWS workstation as a system administrator, or any user account with write access to the System directory.
2. Navigate to SYSTEM.CLIENT.VERSIONS and open the first story in that queue.
3. On a new line, add the version of the Interplay Central service that will run on the Interplay Central middleware server.
4. Save the story.
5. Reconfigure the system. From the iNEWS console:
 - a. Select the master computer, which is typically server A.
 - b. Enter superuser mode, using the correct password.
The dollar sign (\$) at the end of the console’s server prompt will change to a pound sign (#).
 - c. Take the system offline by typing: NRCS-A# **offline**
 - d. Reconfigure the system by typing: NRCS-A# **configure**
 - e. When the prompt reappears, bring the system back online by typing: NRCS-A# **online**
 - f. Press Ctrl+D to leave superuser mode.
The pound sign (#) at the end of the console’s server prompt will change back to a dollar sign (\$).

Editing **SYSTEM.CLIENT.WINDOWS**

The following procedure only applies to sites that are not using a “site” license as Workstation addresses in iNEWS. You can review your site license information from the iNEWS console. For more information, see [“Verifying Interplay Central Licenses on iNEWS” on page 24.](#)

Some steps in the following procedure are conducted at the iNEWS console in superuser mode. For more information, see “The iNEWS Console” chapter in the *iNEWS Installation and Configuration Guide*.

To edit the **SYSTEM.CLIENT.WINDOWS** story in iNEWS:

1. Sign in to an iNEWS workstation as a system administrator, or any user account with write access to the System directory.
2. Navigate to **SYSTEM.CLIENT.WINDOWS** and open the first story in that queue.
3. Add the IP address of the Interplay Central middleware server to a new line. Use a semicolon to add helpful commentary for future reference to the end of the line.

For instance, type: **125.1.100.5 ;Interplay Central middleware server**

- If there are multiple middleware (Web application) servers, you will need to add the IP address for each one on individual lines in the story.
 - However, if a load balancer is used with the multiple middleware servers, and communication will always be through the load balancer, then add only the virtual IP address of the load balancer instead.
 - And if the load balancer is used, but some direct client-to-server communication is probable, then add the IP addresses for the load balancer and all middleware servers.
4. Save the story.
 5. Reconfigure the system. From the iNEWS console:
 - a. Select the master computer, which is typically server A.
 - b. Enter superuser mode, using the correct password.

The dollar sign (\$) at the end of the console’s server prompt will change to a pound sign (#).

- c. Take the system offline by typing: **NRCS-A# offline**
- d. Reconfigure the system by typing: **NRCS-A# configure**
- e. When the prompt reappears, bring the system back online by typing: **NRCS-A# online**
- f. Press Ctrl+D to leave superuser mode.

The pound sign (#) at the end of the console’s server prompt will change back to a dollar sign (\$).

Setting up the Load Balancer

In dual-server systems, a load balancer can be used to ensure high availability and provide failover functionality.

This section covers setup and configuration of a load balancer for the Interplay Central middleware servers.



The LoadMaster 2200, by Kemp Technologies, is used as an example. If your site uses a different load balancer, refer to the documentation provided by the hardware manufacturer.

The load balancer can be set up initially either by connecting a monitor and keyboard directly to the hardware or by using the Web interface. When connecting via the Web interface, you access the load balancer by a predefined IP address, which can be found in the Quick Start Guide that came with the hardware.

To configure the load balancer, using a keyboard and monitor:

1. The first time you connect, a Quick Setup wizard will appear to walk you through the steps, and the first question might be to provide a license key. If prompted, enter the license key, or you can continue without it temporarily; There is a 30-day trial period.
2. The wizard will then prompt you to set up the network interfaces by entering the IP address of the network side of the load balancer. Type in the IP address including the netmask. The syntax is: `<IP address>/<netmask>`
3. Click OK.
4. When prompted, enter the hostname of the load balancer and click OK.
5. Enter the nameserver IP address(es) and click OK. If there is more than one, separate each by a single space.
6. Enter the search domain(s) and click OK. If there is more than one, separate each by a single space.
7. Enter the IP address of the default gateway of the existing network.
8. Click OK.

After the setup wizard finishes, restart the load balancer.

9. Physically connect the load balancer to the network and to the Interplay Central middleware servers. Connect server 1 to the eth1 interface of the load balancer. Connect server 2 to the eth2 interface.

To configure the virtual service, using the Web interface:

1. Connect to your load balancer using the Web interface by typing in the hardware's predefined IP address.
 For a LoadMaster, the Main Menu screen will appear, showing vital statistics, such as IP address, serial number, version, license activation data, and CPU load.
 Ensure you are using the recommended version of the load balancer. For the latest specifications, please refer to the Avid Web site or the latest ReadMe for Interplay Central.
2. Select System Configuration and then Interfaces.
 - a. Configure the network interface settings for eth1 and eth2. For instance, set the interface address for eth1 to 10.129.106.5/25 and for eth2 to 10.129.106.130/25.
 - b. Also set Link Status to Automatic.
3. Select Virtual Services.
4. Click Add New.
5. Specify the parameters for the virtual service.
 - a. In the Virtual Address field, enter the virtual IP address for the load balancer.
 - b. Set the port to 443.
 - c. Set the protocol to TCP.
6. Click Add this Virtual Service to confirm the settings.
 This will send you to the Basic Properties screen for the virtual service.
7. Set Service Type to HTTP/HTTPS.
8. Set Extra Port to 80.



The virtual service by default is configured on port 443 (the default https port); therefore you will only be able to connect to the real servers via port 443 if you do not specify this extra port in the settings.

9. Set the Real Server Check Parameters to:
 - HTTP Protocol
 - Checked Port: 80
 - URL: /rest/heartbeat/with-failover?com.avid.central.rest.accept-all
 - Uncheck Use HTTP/1.1
 - HTTP Method: GET
 - Reply 200 Pattern: HEALTHY
10. (Optional) Set the service nickname.

11. Set Persistence Options to:
 - a. Mode: Source IP Address
 - b. Timeout: 1 Day
 - c. Netmask: /32
12. Set Scheduling Method to Fixed Weighting.
13. Set Idle Connection Timeout to 15.
14. Select the Use Address for SNAT checkbox
15. Scroll down to SSL Properties and ensure that SSL Acceleration is not checked.
16. In the last section of the Real Servers for this Virtual Service, select Add New and specify the following parameters:
 - a. In the Real Server Address field, enter the IP address for the first Interplay Central middleware server.
 - b. Set the port to 443.
 - c. Set Forwarding Method to “nat”.
 - d. Set Weight to 1000.
17. Click Add This Real Server, then repeat the previous step for the second Interplay Central middleware server, with two exceptions; enter the IP address of the second server instead of the first one, and set the Weight to 500.
18. Physically connect the load balancer to the Interplay Central middleware servers. Connect server 1 to the eth1 interface of the load balancer. Connect server 2 to the eth2 interface.
19. Check the Virtual Services screen, using the load balancer’s Web interface; the status should be green.

2 The Interplay Central Middleware Server

Interplay Central middleware server is the Web application server used to manage communications between Interplay Central workstations and back-end systems, such as the iNEWS newsroom computer system.

The following main topics describe the installation and configuration procedures of the middleware server(s).

- [Checklist: Set up Interplay Central Middleware Server](#)
- [Checklist: Configure Interplay Central Middleware Server](#)

Checklist: Set up Interplay Central Middleware Server

This checklist assumes all pre-installation steps have been completed as outlined in “[System Setup Tasks](#)” on page 20 and “[Checklist: Before You Begin](#)” on page 21.

When you are ready to set up the Avid Interplay Central middleware server(s), ensure the following tasks are completed.

☒	Tasks	Refer to...
☐	Install the ISIS Client.	“ Install the ISIS Client Software ” on page 33
	<i>If your site will only use devices running the Interplay Central mobile application and not the Web application, then you do not need to install ISIS.</i>	
☐	Install Avid Service Framework and join the Interplay workgroup.	“ Install Avid Service Framework ” on page 34
☐	Install the Interplay Central distribution service.	“ Install the Interplay Central Distribution Service ” on page 38
☐	Install the Interplay Central user management service.	“ Install the Interplay Central User Management Service ” on page 40
☐	Run the Interplay Central setup to install the Interplay Central service and all modules.	“ Run the Interplay Central Setup ” on page 42
☐	Reboot the server.	
☐	Verify and/or configure the Interplay Admin settings that are applicable to Interplay Central	“ Configuring the Application Database Settings ” on page 54
☐	(Optional) Configure custom certificate(s) for the Interplay Central middleware server.	“ Deploying Another Certificate to the Middleware Server ” on page 57

Install the ISIS Client Software

The ISIS client application is provided as part of the Avid ISIS software installation kit, a USB flash drive containing about 4 GB of data.

You can install the client software in several ways:

- You can take the software kit to each computer separately and install it.
- You can store the client software somewhere on the corporate network and allow everyone who needs the software to gain access to install it.
- You can use a browser to reach the ISIS Management Console and install it from the System Director because it was loaded during the previous installation of the client installers. The following procedure provides details for this method of installation.



Before installing Avid ISIS client software on Windows systems, make sure you are up-to-date with your Windows critical or “high priority” updates.

To install the client software using a browser:

1. Start your browser application.
2. Go to `https://IP address of System Director (or virtual name):5015`.

The ISIS Management Console opens.

3. Type your administrator’s password.
4. Click Administration.

The Avid ISIS Installer Downloads screen opens.

Category	Installer	File
ISISBlades/	ISISStorageBlade_.tgz	download
ISISBlades/	ISISSwitchBlade_.tgz	download
ISISClient/	AvidISISClient_AirSpeed_.iso	download
ISISClient/	AvidISISClient_MacOSX_.dmg	download
ISISClient/	AvidISISClient_Win32_.msi	download
ISISClient/	AvidISISClient_Win64_.msi	download
ISISClient/	AvidUnityISISClient_ILRE_.tgz.des	download

5. Click the ISISClient installer named `AvidISISClient_Win64_.msi`.

The installer might ask if you want to save or run the installation software; either is acceptable.

6. Following the Setup Wizard prompts—accepting the license agreement and default settings—to complete your installation.
 - ▶ (Optional) During a Windows-based installation, a question could appear asking who the software is for; select Everyone.
7. After you receive the Installation Complete dialog box, click Close.

The client software is installed.
8. Restart the client system if prompted to do so.

Install Avid Service Framework

Avid Service Framework consists of several applications and services that provide dynamic discovery and lookup mechanisms and other tools used for diagnostics, configuration, and support.

The installer for Avid Service Framework is provided on the Avid Interplay Servers Installer USB flash drive, and not with Interplay Central. The installer can be copied to a network computer and later accessed from there, or used directly from the USB flash drives.



Before installing ASF, ensure that Internet Information Services (IIS)—if installed—is disabled so they do not interfere with ASF ports. If IIS must remain enabled, change the port used by IIS or used by Interplay Central to avoid a conflict. For more information, see “[Changing Port Configuration](#)” on page 52.

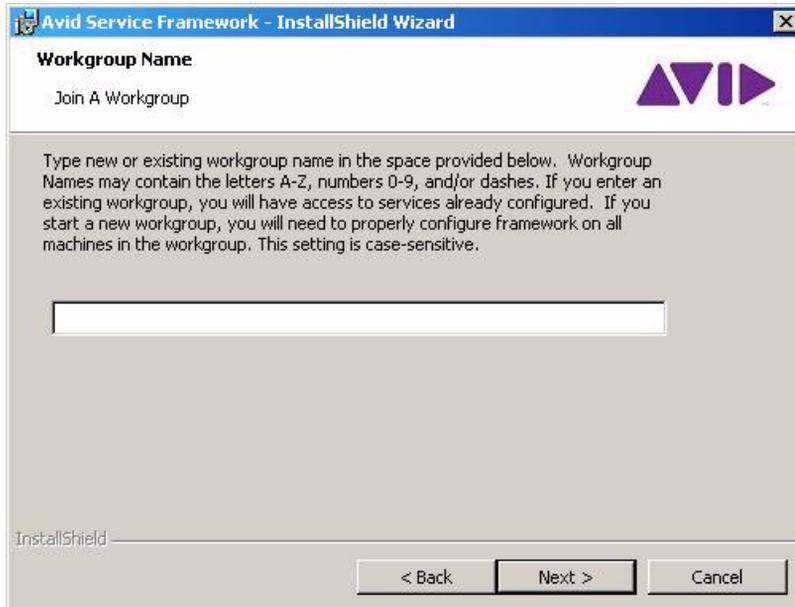
To install the Avid Service Framework software:

1. From the Interplay Server Installer Main Menu, select Individual Optional Installers.

The Optional Installers window opens.



2. Click Avid Service Framework Custom.
The Welcome dialog box opens.
3. Click Next.
The Destination Folder dialog box opens.
4. Accept the default values and click Next.
The Join a Workgroup Name dialog box opens.



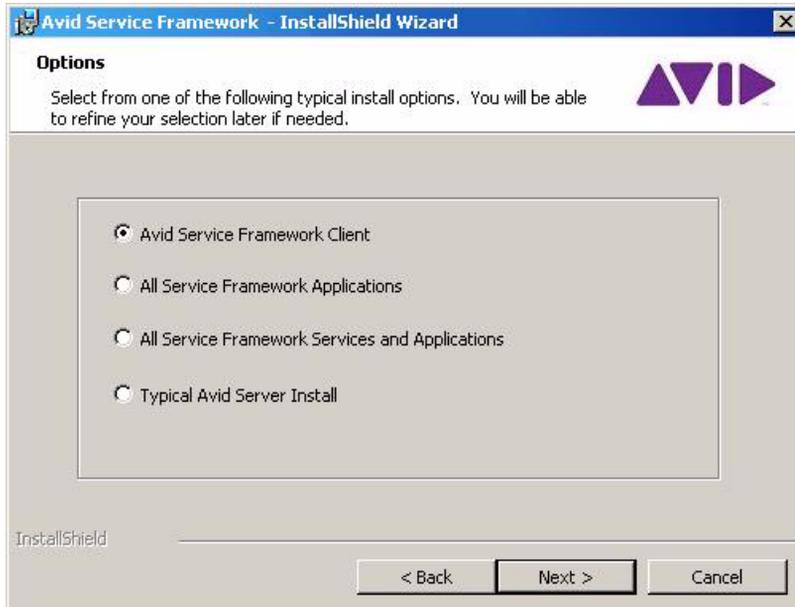
5. Type the name of your Interplay workgroup and click Next.

The workgroup name is case sensitive. Use the same name on all Interplay clients.



If you are updating the Service Framework software, the installer remembers the last installed value. If the workgroup name was changed after the install, the installer will not be aware of the change.

The Options dialog box opens.



6. Select the Avid Service Framework Client install option.
7. Click Next.

The Custom Setup dialog box opens with the following applications and services already selected for you:

- Avid Service Configuration
- Avid Diagnostics
- Avid Health Monitor
- Avid Machine Monitor Service
- Avid Time Synchronization Service (optional)

8. Accept the default selections. Click Next.



Do not add components that you don't need. This can affect system performance.

9. Follow the installation instructions to complete the installation.



You might be required to restart your system to complete the installation.

Optional Applications

The following applications are not included as part of the Interplay Central installation, but can be installed (if licensed) as optional client applications on the Interplay Central middleware server:

- Interplay Access — if you want to install this application, use the same version already licensed for use in your Interplay environment.
- iNEWS — if you want to install the client application, use the same version already licensed for use in your newsroom.
- Google Chrome

These applications are not required; however, since Interplay Central can be used to connect to both iNEWS and Interplay Production databases, the two Avid applications can come in handy on the server to check connectivity to the back-end systems once installation and configuration is complete.



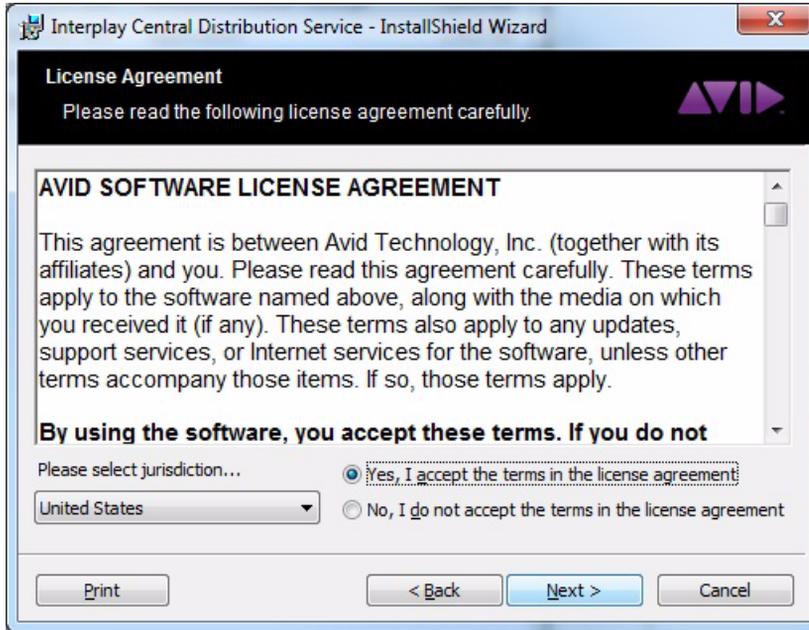
Installing Interplay Access on the middleware server also installs the Interplay Administrator application, which can be used to verify certain settings applicable to Interplay Central. For more information, see “Configuring the Application Database Settings” on page 54.

Install the Interplay Central Distribution Service

The Interplay Central Distribution service is used to coordinate jobs with Avid Media Services for sequence mixdowns and send to playback.

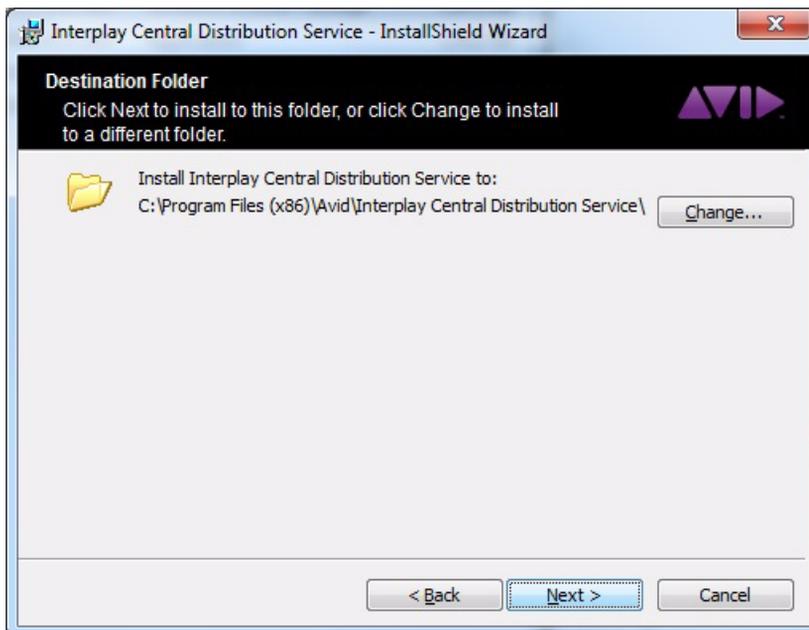
To install the distribution service:

1. On the Interplay Central installation USB flash drive, navigate to the Central Distribution Service folder.
2. Double-click the Interplay Central Distribution Service Windows installer package.
The Welcome dialog box appears.
3. Click Next.
The License Agreement dialog box appears.

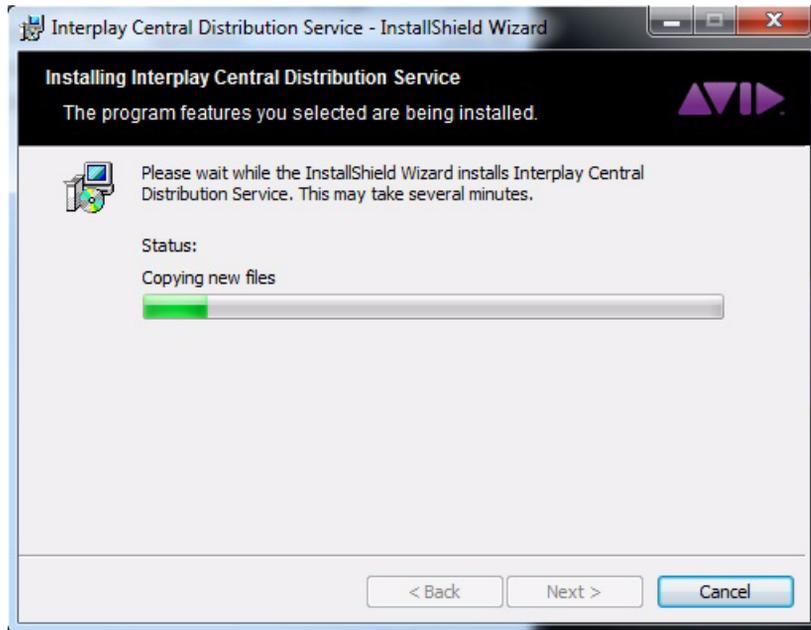


4. After you read the license agreement, select Yes to accept the terms and choose the appropriate jurisdiction. Then click Next.

The Destination Folder dialog box appears.



5. Accept the default values and click Next.
6. When the Ready to Install the Program dialog box appears, click Install.



7. When the process is complete, the InstallShield Wizard will inform you of the successful installation. Click Finish.

Install the Interplay Central User Management Service

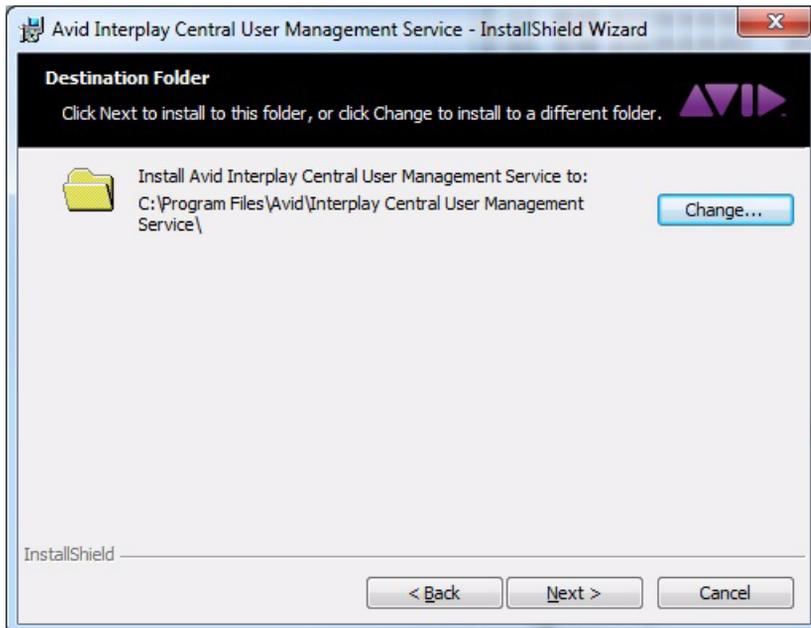
Interplay Central User Management is a service that provides the ability to create and manage users and groups, authenticate users across iNEWS and Interplay Production systems, and manage the Interplay Central licenses to which users have access.

To install the Interplay Central User Management service:

1. On the Interplay Central installation USB flash drive, navigate to the Interplay Central User Management setup application and double-click to start it.
After a moment, the Welcome dialog box will appear.
2. Click Next.
The License Agreement dialog box opens.

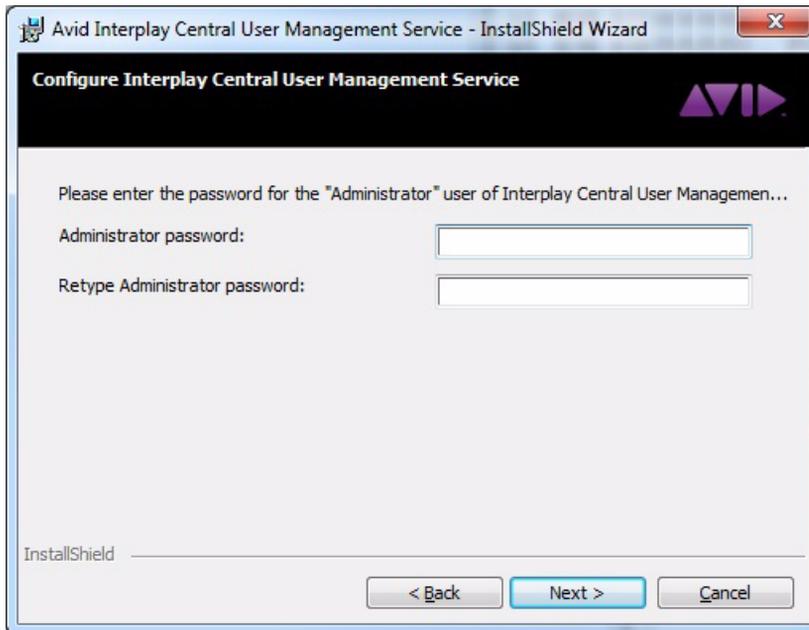


3. After you read the license agreement, select accept the terms. Then click Next. The Destination Folder dialog box opens.



4. Accept the default values and click Next.

The Configure Interplay Central User Management Service dialog box opens.



5. Enter the password for the Administrator user account for Interplay Central User Management. Then reenter the password and click Next.
6. When the Ready to Install dialog box appears, click Install to begin the installation.
7. When the process is complete, the InstallShield Wizard will inform you of the successful installation. Click Finish.

Run the Interplay Central Setup

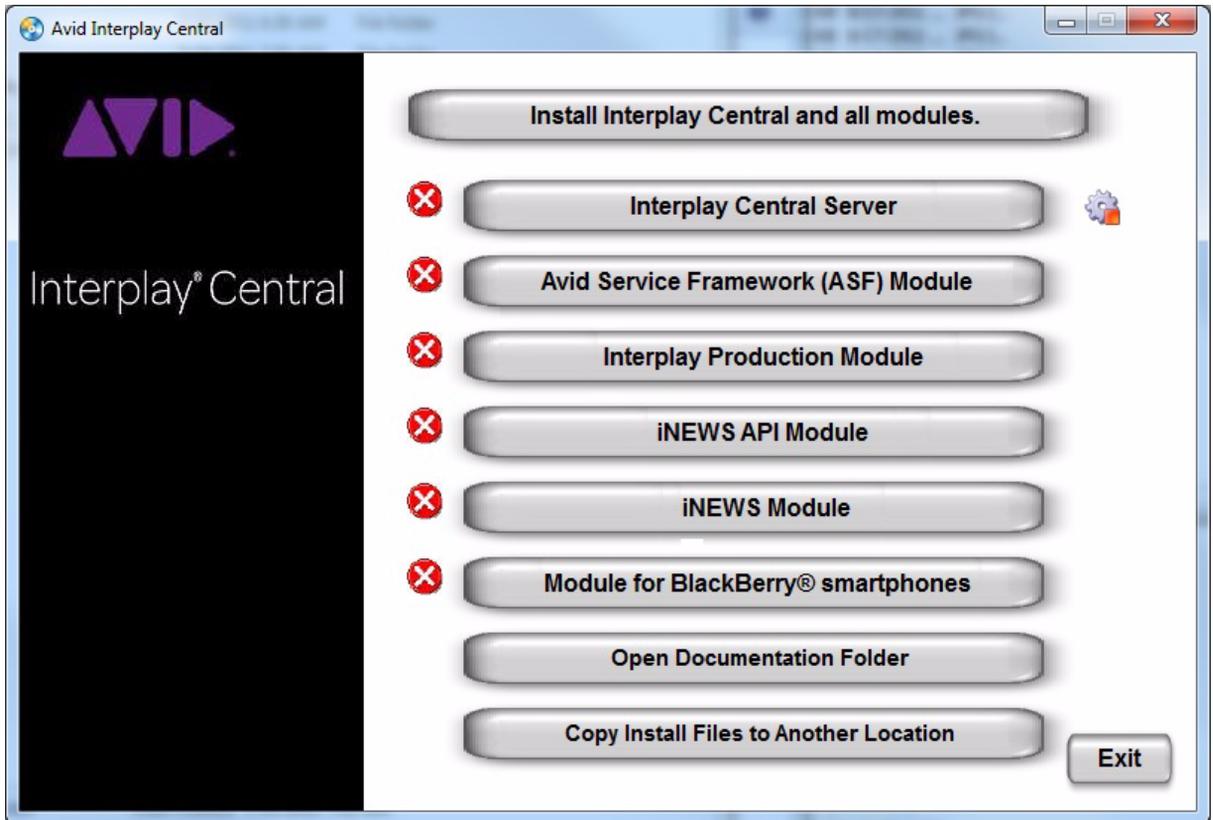
The Interplay Central setup application enables you to install the Interplay Central Server service and its available modules. The setup application can be accessed from the Interplay Central installation USB flash drive, or copied to another location for access over the network.

To install the Interplay Central service and all modules:

1. On the Interplay Central installation USB flash drive, navigate to the Interplay Central setup application and double-click to start it.

If prompted to allow the program to make changes to your computer, click Yes.

The setup application checks the computer to determine if Interplay Central or any of its modules are already installed and then displays the Main Menu screen.



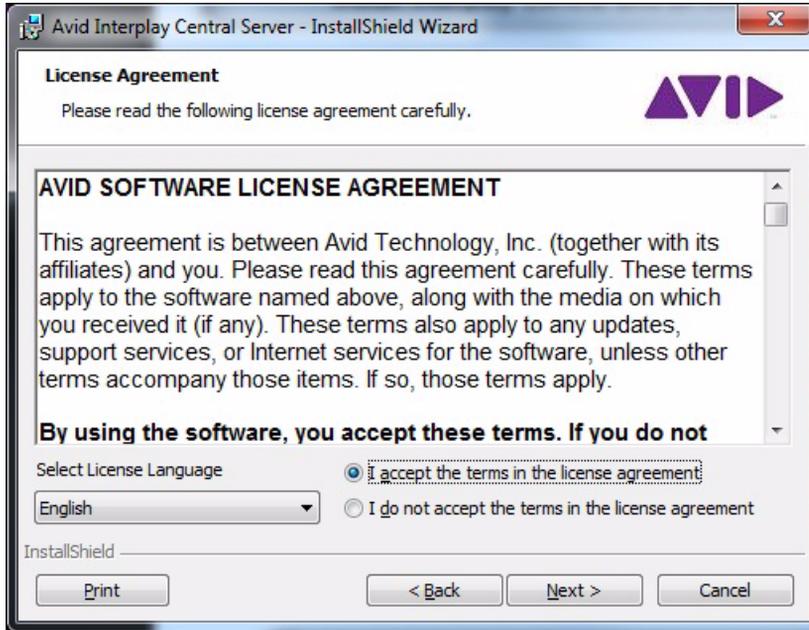
The red X icons located to the left of the buttons are individual indicators to show whether each service or module is already installed. If a service or module already exists on the computer, a green check icon appears instead. Likewise, the gear icon will have a red square over it when the setup application completes its system check without finding any previous versions installed. The shape is a green triangle over the gear if one or more services or modules are found to be installed.

2. Click Install Interplay Central and all modules.

The InstallShield Wizard prepares to install the Interplay Central Server service and then displays the Welcome dialog box.

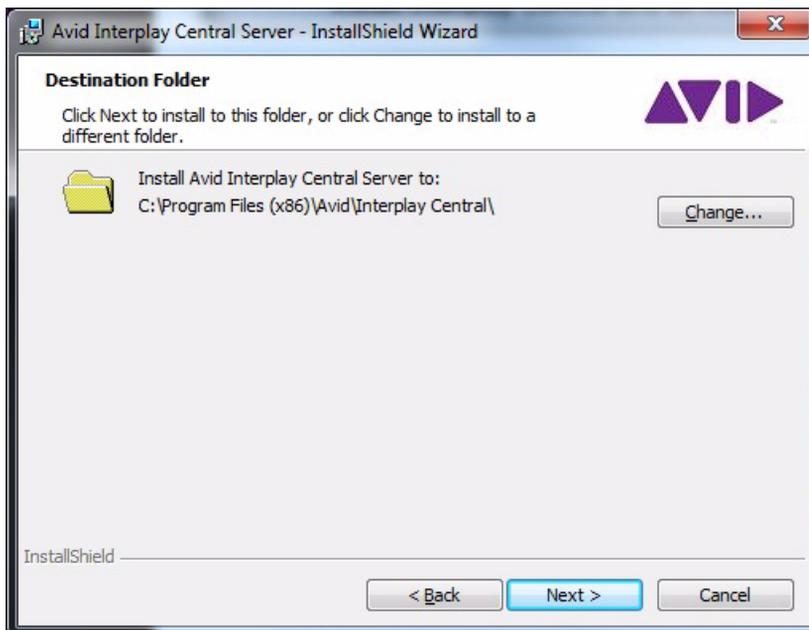
3. Click Next.

The License Agreement dialog box opens.



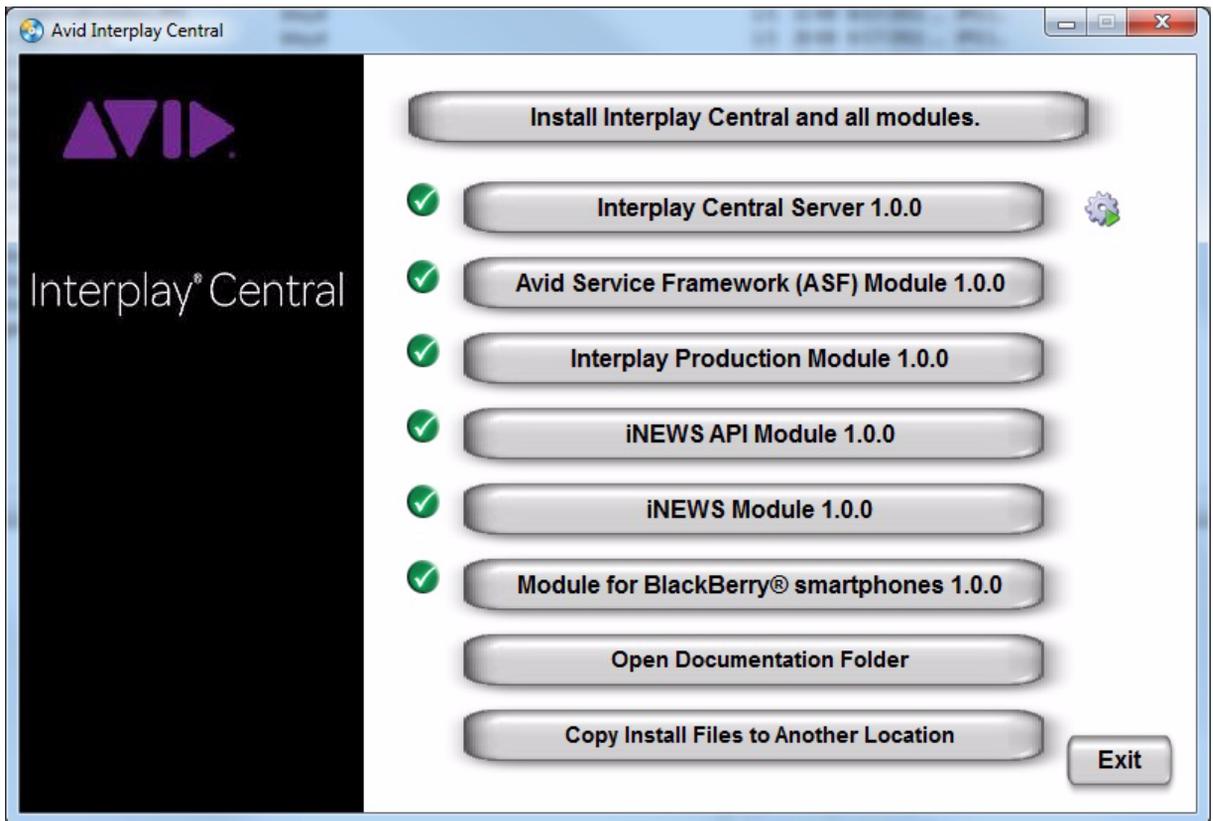
4. After you read the license agreement, select accept the terms and choose the appropriate license language. Then click Next.

The Destination Folder dialog box opens.



5. Accept the default values and click Next.
6. When the Ready to Install dialog box appears, click Install.
7. When the process is complete, the InstallShield Wizard will inform you of the successful installation. Click Finish.

The setup application will then proceed to install each module. Status dialog boxes will appear as the installation processes progress. Additionally, the red X icons on the Main Menu screen will change to green check icons as each one is installed. The gear icon with the red square also changes to reflect the final status of the installation, as shown in the following illustration.



8. After your install, reboot the middleware server.

Checklist: Configure Interplay Central Middleware Server

When you are ready to configure the Avid Interplay Central middleware server(s), ensure the following tasks are completed.

☒	Tasks	Refer to...
☐	Set up the remote host(s) for ISIS. This task applies to sites where the Interplay Central middleware server is in a different subnet than the ISIS system.	“Set up the Remote Host for ISIS” on page 47
☐	Specify a lookup locator(s) for ASF, if needed.	“Specify a Lookup Locator for Avid Service Framework” on page 48
☐	Ensure forward and reverse DNS lookups work to Interplay, ISIS, and iNEWS by running DNS tests across the network.	“Run DNS Tests against Hosts in the Network” on page 49
☐	Configure Interplay Central for iNEWS connectivity.	“Configure System Settings for iNEWS Integration” on page 49
☐	Configure Interplay Central for Interplay connectivity.	“Configure System Settings for Interplay Integration” on page 50
☐	Create the cluster for the Interplay Central User Management services. This task applies to sites set-up for high availability.	“Creating a Cluster for User Management” on page 52
☐	(Optional) Customize port settings for Interplay Central.	“Changing Port Configuration” on page 52
☐	(Optional) Set custom location for backup user management database files.	“Set the Backup Location for User Management Database Files” on page 53
☐	Configure or verify the Application Database settings are correct for Interplay Central, using the Interplay Admin application.	“Configuring the Application Database Settings” on page 54
☐	Configure the Transfer settings for send to playback to work in Interplay Central.	The <i>Avid Interplay Transfer Setup and User’s Guide</i> . See the chapter on “Interplay Transfer Configuration”.

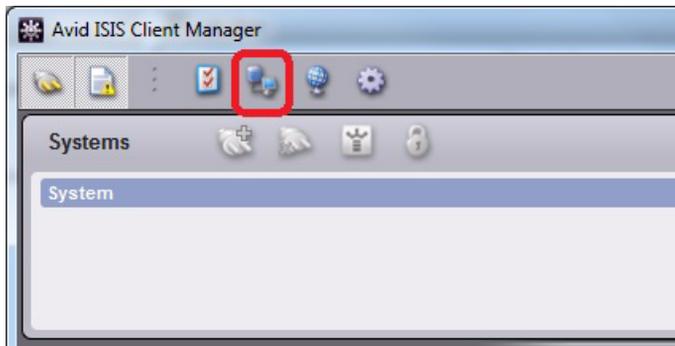
☒ Tasks	Refer to...
☐ Configure Media Services for the sequence mixdown and send to playback features in Interplay Central.	The <i>Avid Interplay Media Services Setup and User's Guide</i> . See the sections "Working in the Transcode Service" and "Exporting and Transferring Long GOP OP1a Media in the Background".

Set up the Remote Host for ISIS

After installing the ISIS client software, you will need to specify a remote host for ISIS on the Interplay Central middleware server.

To specify a remote host:

1. Start the Avid ISIS Client Manager by clicking Start > All Programs > Avid > ISIS Client.
2. Click the Remote Host Settings button, as highlighted in the following illustration.



The Remote Hosts dialog box opens.



3. Enter the hostname for the remote ISIS server and click the Add (+) button.
The ISIS server will appear in the Host list.



Ensure that you typed the hostname correctly before applying your changes.

4. Click the Apply button (green checkmark).

Specify a Lookup Locator for Avid Service Framework

After installing Avid Service Framework and after joining the Interplay workgroup, you should not need to specify a lookup locator for ASF on the Interplay Central middleware server. It should be provided to the server automatically. However, you should verify that this occurs and if necessary be prepared to manually specify them.

To view and/or add lookup locators for ASF:

1. Open Avid Workgroup Properties by clicking Start > All Programs > Avid > Avid Service Framework > Avid Workgroup Properties.
2. Select the Lookup tab.
The workgroup and lookup services are listed.
3. (Optional) Only if necessary, use the Add button under the Lookup Services section of the dialog box to add lookup locators. Ensure the name you enter is spelled exactly correct. Then click Apply.
4. Click OK.

Run DNS Tests against Hosts in the Network

Avid Workgroup Properties, one of the Avid Service Framework applications, provides a Network tab which you can use to test the DNS lookup capability of the middleware server, to ensure everything is working properly. This network test tool does a forward and reverse lookup for each client in the workgroup from the computer used to initiate the test.

To run a DNS test from the middleware server:

1. Open Avid Workgroup Properties by clicking Start > All Programs > Avid > Avid Service Framework > Avid Workgroup Properties.
2. Select the Network tab.
Ensure that Load host list from Lookup Service is selected and that the appropriate workgroup is chosen.
3. Click Run.

Configure System Settings for iNEWS Integration

You can configure system settings for Interplay Central after signing in with the user name Administrator. The password for the administrator account was set during installation of the Interplay Central User Management service. For more information, see [“Install the Interplay Central User Management Service” on page 40](#).

The following procedure only pertains to configuring a couple of vital settings related to iNEWS integration with Interplay Central.



Additional settings are available in the iNEWS settings group; however, those are discussed in more detail in the [Interplay Central Administration Guide](#).

To configure system settings for iNEWS integration:

1. Sign in to Interplay Central as an administrator.
2. Select System Settings from the Layouts drop-down menu.
3. From the list under the Settings tab, select iNEWS.

The screenshot shows the Interplay Central Administration interface. The top navigation bar includes 'Home', 'Sign Out', and a 'System Settings' dropdown. The main content area is divided into 'Settings' and 'Details' tabs. The 'Settings' tab is active, and the 'iNEWS' group is selected. The 'Details' tab shows the following configuration:

- iNEWS Server:** Specify the iNEWS server to which you want to connect. Note: The modified server settings will apply to users the next time they sign in.
 - Hostname: IPC
- Location for Script Sequences:** Specify the Interplay Production database location for script sequences. For example: Projects/iNEWSsequences/
 - Path: Projects/iNEWSsequences
 - Queue Date Story
- Pagination:** Specify the maximum number of items displayed in the Queue/Story pane and the Project/Story pane at a time. The range of possible values is 5 to 255. To view additional items, click the Show More Results button.
 - Maximum Number: 50

Buttons for 'Revert' and 'Apply' are located at the bottom right of the settings panel.

The Details tab displays the settings for iNEWS.

4. In the Hostname field, enter the name for the server that hosts the iNEWS database.

Typically, the name of each iNEWS server includes a suffix to distinguish one from another, such a WAVD-A and WAVD-B. In the settings for Interplay Central, do not include the suffix when entering the iNEWS server's hostname.

So, using the previous sample names, you would type **WAVD** only.

5. In the Path field, specify the location of the folder in the Interplay Production database used to store the sequences created as part of an iNEWS script. You also need to select whether you want sub-folders in the parent folder to be created by Queue name, Date, or Story name.
6. Click Apply before selecting any other group in Settings to modify.

Configure System Settings for Interplay Integration

You can configure system settings for Interplay Central after signing in with the user name Administrator. The password for the administrator account was set during installation of the Interplay Central User Management service. For more information, see [“Install the Interplay Central User Management Service” on page 40](#).

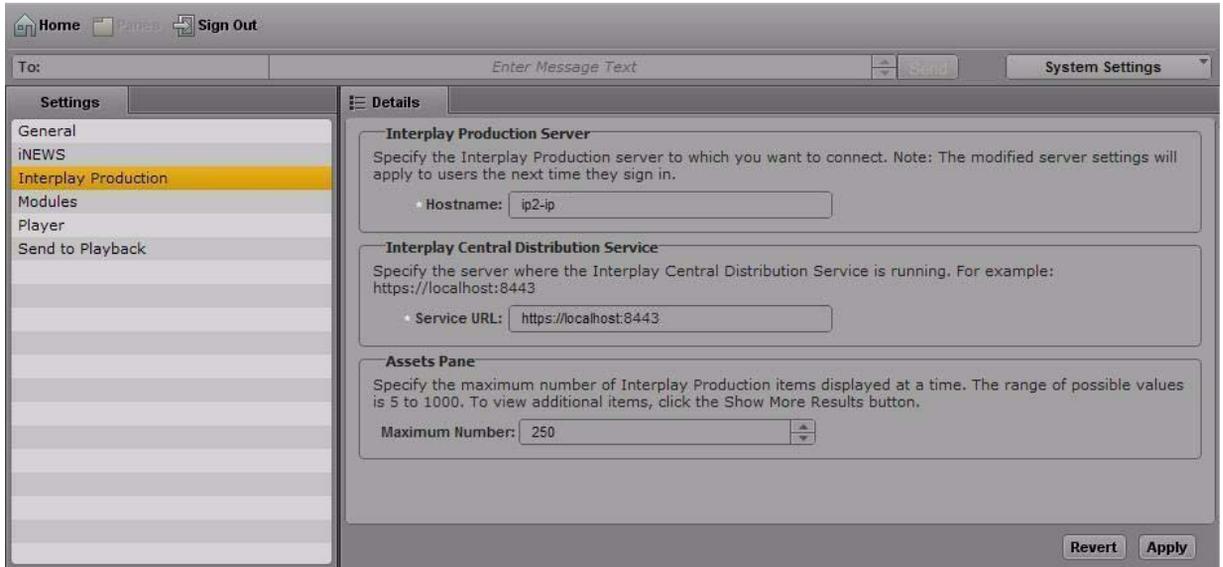
The following procedure only pertains to a couple of vital settings related to Interplay Production integration with Interplay Central.



Additional settings are available in the Interplay Production settings group; however, those are discussed in more detail in the Interplay Central Administration Guide.

To configure settings for Interplay Production integration:

1. Sign in to Interplay Central as an administrator.
2. Select System Settings from the Layouts drop-down menu.
3. From the list under the Settings tab, select Interplay Production.



The Details tab displays the settings for Interplay Production.

4. In the Hostname field, enter the name or IP address for the server that hosts the Interplay Production database.
5. In the Service URL field, specify a secure URL for the server that hosts the Interplay Central Distribution Service. The format for the URL is `https://<hostname>:<port number>`.
For instance: `https://localhost:8443`. You can use an IP address instead of the hostname.
6. Click Apply before selecting any other group in Settings to modify.

Creating a Cluster for User Management

For sites wanting a high availability setup, the Interplay Central User Management services are required to run in cluster mode for data synchronization. Before creating the cluster, you must decide which User Management service should be used as master because the data stored in the master will overwrite the one from the slave.

To create a cluster:

1. Sign in to the Interplay Central middleware server on which the User Management service is running.
2. From a command line, navigate to C:\Program Files\Avid\Interplay Central User Management Service\bin
3. Type the Create Cluster command using the following syntax:

```
IPUMUtils.cmd -cc <master IP address> <slave IP address> <administrative password>
```

The -cc is the command to “create the cluster”.

For additional information regarding this command and its options, you can type:

```
IPUMUtils.cmd --help
```

After you enter the Create Cluster command, the cluster will be created automatically.



The command creates a backup of the slave database, located in:

```
%ALLUSERPROFILES%\Avid\Interplay Central User Management Service\db_backup\
```

Changing Port Configuration

By default, Interplay Central uses port 80 for HTTP and port 443 for HTTPS (secure) communications. This could result in a conflict with IIS, if IIS remains enabled on the Interplay Central middleware server(s). Therefore, if you want to reconfigure your Interplay Central system to use different ports, you can do so by editing the application’s properties.



System application.properties are located at:

C:\Program Files (x86)\Avid\Interplay Central\Server\config.

Changes to the configuration settings of this file can be lost after updates are installed.

To customize port configuration settings for Interplay Central:

1. Go to C:\ProgramData\Avid\AvidInterplayCentralService\Config. Changes to this file will overwrite those in the system’s application.properties file.
2. Open the custom application.properties file.

If it does not exist, create it with the properties you was to change for your system.

The lines to add or modify are:

```
system.org.osgi.service.https.enabled=true
system.org.osgi.service.https.only=true
system.org.osgi.service.https.port=443
system.org.osgi.service.http.port=80
```

The “https.enabled” line, if set to true, enables encrypted communications through a secure HTTPS port. The “https.only” line, if set to true, means that when an Interplay Central user connects to the HTTP port, they will be redirected to the secure port automatically, thereby ensuring encrypted communications. If set to false, communication is unencrypted to the server, therefore the user can connect via the HTTP port.

3. Modify the lines accordingly and save your changes.

Set the Backup Location for User Management Database Files

By default, the Interplay Central User Management service stores its backup database files at: C:\ProgramData\Application Data\Avid\Avid Interplay Central User Management Service\db_backup. Should you want to store your backup files in a different location, you can do so by modifying the service’s properties file.

To set a unique backup location for user management database files:

1. On the C: drive, navigate to Program Files > Avid > Interplay Central User Management Service > Config.
2. Open the uls.properties file.

The line to look for is:

```
uls.db.backup.path=C:\ProgramData\Application Data\Avid\Avid
Interplay Central User Management Service\db_backup
```

3. Modify the line with a new path after the equal sign (=) and save your changes.



You can also specify the frequency of the backups, which by default is set to daily.

Configuring the Application Database Settings

After installing the Interplay Central middleware server for a new site, you need to configure some settings in the Interplay Administrator application that are applicable to Interplay Central. For existing Interplay environments, the settings covered in this section might already be set, but you should still verify whether they are set correctly for Interplay Central.

To check or modify Application Database settings in the Interplay Administrator:

1. Start and log in to the Interplay Administrator application.



If you installed Interplay Access on the middleware server (optional), the Interplay Administrator application was installed as well. If not, you'll have to locate the computer in your Interplay environment on which the application was installed.

2. Select Application Database Settings.

A scroll bar is provided to view all of the settings available, most of which apply to Avid Instinct. However, there are several sections on the Editing Settings tab that apply to Interplay Central, as outlined in the following table.

Note: This table is copied in Chapter 1 of the *Interplay Central Administration Guide*, so make any changes in both places. Conreffing was complicated by the x-ref.

Section	Setting	Description
Format	Video Format	Interplay Central does not restrict by format, but uses this setting to determine the frame rate required for sequence editing. Options include: HD 1080i, PAL, NTSC, Any, and so forth. If set to Any, then a sequence's framerate will be set by the first clip added to the sequence.
Audio Patching	Natural Sound	What you choose in the Audio Patching section determines how many channels are shown (for NAT or SOT) in the context menu options for audio when a user right-clicks on a clip within the Script Editor's Sequence Timeline. This setting is the channel count for natural sound. Options include: 1-Channel or 2-Channel.
	Sound on Tape	This setting is the channel count for sound on tape. Options include: 1-Channel or 2-Channel.
Audio - Track labels	Natural Sound label	This setting determines the wording or character(s) used as a label for the natural sound track control in the Audio pane as well as the header for the natural sound column in the Script Editor's Sequence Timeline. By default, NAT is used.

Section	Setting	Description
Audio - Source audio patching	Sound on Tape label	This setting determines the wording or character(s) used as a label for the sound on tape track control in the Audio pane as well as the header for the sound on tape column in the Script Editor's Sequence Timeline. By default, SOT is used.
	Voice Over label	This setting determines the wording or character(s) used as a label for the voice over track control in the Audio pane as well as the header for the voice over column in the Script Editor's Sequence Timeline. By default, VO is used.
	Natural Sound tracks 1 & 2	These settings determine which two tracks are used for natural sound from the source media.
Audio - Storyline audio patching	Sound on Tape tracks 1 & 2	These settings determine which two tracks are used for sound on tape from the source media.
	Voice Over track	This setting determines which track is used for voice over audio from the source media.
	Natural Sound tracks 1 & 2	These settings determine which two tracks are used for natural sound on the output sequence. Each track for natural sound and sound on tape must be unique. For instance, do not set the first track for natural sound to A1 if the first track for sound on tape is already set to A1.
Audio - General settings	Sound on Tape tracks 1 & 2	These settings determine which two tracks are used for sound on tape on the output sequence. Each track for natural sound and sound on tape must be unique. For instance, do not set the first track for sound on tape to A1 if the first track for natural sound is already set to A1.
	Voice Over track	This settings determines which track is used for voice over audio on the output sequence.
	Media Creation workspace	This is the name of the location on ISIS where Interplay Central creates voice over files.
Dynamic Relink	Sample bit depth	Set this to 16 for Interplay Central.
	Ducking [-db]	When audio must be ducked because of overlapping tracks, this setting (in decibels) is what determines the reduction in audio level.
Dynamic Relink Enabled	Dynamic Relink Enabled	This setting is <i>not</i> configured for Interplay Central in this location of the Interplay Administrator application. Instead, this setting is configured on the Interplay Central playback server. For more information, see “Configure the Interplay Central Playback Service” on page 66 .

Section	Setting	Description
Audio Effects	Dissolve Duration [frames]	Brief dissolves between audio tracks are used to make audio edits sound smooth. Set this to the number of frames you want dissolves between audio edits to last.
	Center-Panned Sound on Tape and Voice Over	This setting is <i>not</i> used for Interplay Central.

3. Click Apply to save any modifications made to your settings.

Deploying Another Certificate to the Middleware Server

On an installed Interplay Central middleware server the default 'non-trusted' self-signed certificate key store gets generated on the first startup of the server. It resides at this location:

```
%programdata%\Avid\AvidInterplayCentralService\ssl\jetty.keystore
```

However, you might want to configure your own, possibly trusted certificate. For instance, existing certificates might be wanted to get imported into the existing key store, or a new key store with a certificate that has been signed by a trusted certificate authority (CA) could be provided. If you want to configure your own, you must provide a custom keystore file that meets the requirements of a JKS (Java key store), and complete the following steps:

To deploy another certificate:

1. Modify the following file:

```
%ProgramFiles(x86)%\Avid\Interplay Central\Server\config\application.  
properties
```

Add the corresponding attributes with its appropriate values:

Attribute	Description
• system.org.osgi.service.ssl.password	These are the passwords that go along with the certificate generation process. The passwords might be 'Jetty obfuscated'.
• system.org.osgi.service.ssl.keypassword	
• system.org.osgi.service.ssl.algorithm	The current default decryption algorithm is 'RSA'. So this attribute could be omitted if it matches already.
• system.org.osgi.service.https.keystore.path	This is the file name of the new keystore file that needs to be put at: %programdata%\Avid\AvidInterplayCentralService\ssl\

2. Restart the Interplay Central service to pick up the new keystore.

3 The Interplay Central Playback Server

Interplay Central playback server reads multiple media assets and sequences via Interplay, and MXF files residing on an ISIS, and then compresses that media for playback on Internet-connected clients. In an Interplay Central system, a site can “cluster” multiple playback servers to scale horizontally.

The following main topics describe the installation and configuration procedures of the playback server(s).

- [Checklist: Before You Begin](#)
- [Checklist: Set up Interplay Central Playback Server](#)
 - [The Wiring Diagram for the Interplay Central Playback Servers](#)
 - [Installing the Operating System and Interplay Central Playback Services](#)
 - [Configure the Interplay Central Playback Service](#)
 - [Restart Interplay Central and ISIS Services](#)
 - [Changing Compression Level Configuration](#)

Checklist: Before You Begin

Before you begin, make sure you have the following items on hand:

<input checked="" type="checkbox"/>	Item
<input type="checkbox"/>	The Interplay Central playback server(s)
<input type="checkbox"/>	The Redhat Linux operating system (RHEL 6.0) installation .iso file or DVD media
<input type="checkbox"/>	The Interplay Central playback services installation USB drive
<input type="checkbox"/>	A laptop or desktop computer running the Windows XP, Vista or Windows 7 operating system.

Checklist: Set up Interplay Central Playback Server

The server on which you are installing the Interplay Central Playback services should be physically installed in your engineering environment, and the appropriate network connection(s) to Avid ISIS and/or the house network should be made.

The installation and configuration processes require access to the server's console:

- Directly by connecting a monitor and keyboard to the server
- Remotely via KVM or comparable solution

When you are ready to set up the Avid Interplay Central playback server(s), ensure the following tasks are completed.

<input checked="" type="checkbox"/>	Tasks	Refer to...
<input type="checkbox"/>	Physically install the playback servers.	“The Wiring Diagram for the Interplay Central Playback Servers” on page 60
	<i>Also, ensure that the raid drive set is configured before installing the operating system.</i>	
<input type="checkbox"/>	Install the operating system and Interplay Central Playback services.	“Installing the Operating System and Interplay Central Playback Services” on page 61
<input type="checkbox"/>	Copy the Red Hat Linux operating system to the USB drive, which is supplied by Avid for Interplay Central Playback service installations.	“Copying the .iso File to the USB drive” on page 62
<input type="checkbox"/>	Start the server and access the BIOS to check settings	“Accessing the BIOS” on page 63

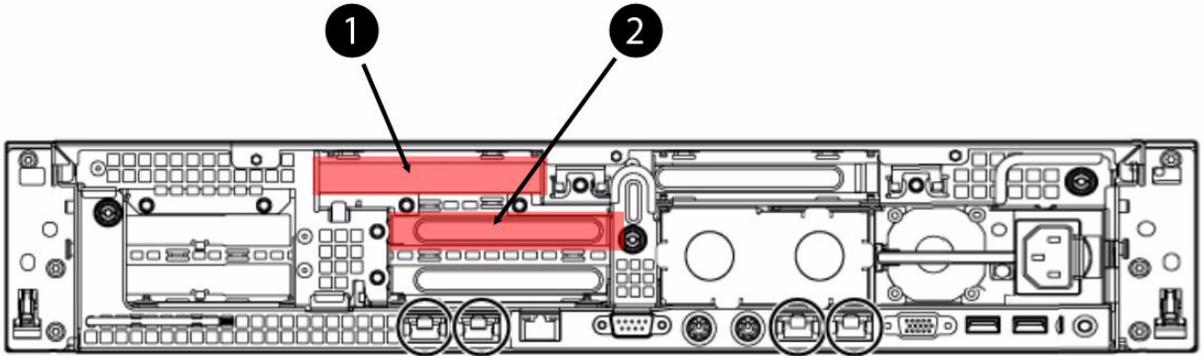
☒	Tasks	Refer to...
<input type="checkbox"/>	Boot the server from the USB drive and run the installer.	“Booting Server from USB drive and Running the Installer” on page 64
	<i>The installation process installs the Red Hat operating system and all Avid software components necessary for the playback server. Some configuration is also required during the installation procedure.</i>	
<input type="checkbox"/>	Edit configuration files to set up the network interface. This task occurs during the installation process.	“Booting Server from USB drive and Running the Installer” on page 64
<input type="checkbox"/>	Remove USB drive and reboot	
<input type="checkbox"/>	Install & configure the load balancer for the playback server(s).	“Configure the Load Balancer for the Playback Server” on page 71
<input type="checkbox"/>	Configure the Interplay Central Playback service.	“Configure the Interplay Central Playback Service” on page 66
<input type="checkbox"/>	Restart the services and and test connectivity by loading an asset into the Media pane.	“Restart Interplay Central and ISIS Services” on page 74
<input type="checkbox"/>	(Optional) Customize the compression levels.	“Changing Compression Level Configuration” on page 75

The Wiring Diagram for the Interplay Central Playback Servers

The playback servers must be installed and connected to the ISIS via a Zone 1 (direct) or Zone 2 (through a switch) connection.

- For 10GigE connections, use the Myricom 10GigE NIC in PCI slot 4.
- For GigE connections, do not use the on-board Broadcom GigE ports. You should have an Intel PROset quad-port GigE NIC in PCI slot 2. Connect to the left-most port on that NIC.

Consult the following wiring diagram for clarification.



-
- | | |
|---|------------|
| 1 | PCI slot 4 |
| 2 | PCI slot 2 |
-

Installing the Operating System and Interplay Central Playback Services

The server on which Interplay Central Playback services are installed is a specific hardware profile that you have received from Avid or procured independently. For more information, refer to the hardware specifications for Interplay Central on the Avid Web site.

Interplay Central Playback services require a server running the Red Hat Linux operating system. The supported version of this OS is RHEL 6.0. Do not install patches or upgrade the Red Hat operating system on your server. Avid will advise you when patches or upgrades are required.

To install the operating system and the Interplay Central Playback services:

1. Copy the Red Hat operating system (the .iso file) to the USB drive. For more information, see the procedure on [page 62](#).
2. Start the server and access the BIOS to check settings. For more information, see the procedure on [page 63](#).
3. Boot the server from the USB drive and run the installer. For more information, see the procedure on [page 64](#).

Copying the .iso File to the USB drive

Avid does not redistribute the Red Hat Linux operating system media on the USB drive. You must download the .iso file from Red Hat directly—or use the Red Hat OS Installation DVD that comes with your server—then copy the OS installation media to the USB drive Avid provides for Interplay Central Playback service installations.

To copy the operating system installation .iso file to the USB drive:

1. Log in to a Windows-based laptop or desktop computer.
2. Do one of the following:
 - ▶ Make sure the .iso file is accessible locally, which is recommended, or over the network from your computer.
 - ▶ Insert the Red Hat OS Installation DVD into your computer.



If you do not have the .iso file or DVD, you can download the .iso file by logging into rhn.redhat.com, using your Red Hat account credentials, and get it. Remember to download only the supported version of RHEL. For more information on supported versions and compatibility, see the latest Interplay Central ReadMe available on the Avid Knowledge Base.

3. Open Windows Explorer and navigate to the USB drive.

The USB drive contains three files:

- iso2usb.exe
- ks.cfg
- ICPS_installer_v100.tar.gz

4. Double-click the executable file, iso2usb.exe.

The ISO2USB for CentOS/RedHat window appears.

5. Do one of the following:
 - ▶ If you downloaded the .iso file, select the Diskimage radio button, then click the Ellipses (...) button and navigate to the .iso file.
 - ▶ If you inserted the Red Hat OS installation DVD, select the CD Disk radio button.
6. Click OK.

The system copies the .iso file to the USB drive, a process that takes 5-to-10 minutes. After the copy process is complete, the USB drive has everything needed for a complete installation of Interplay Central playback services on the playback server.



Copying the .iso file to the USB drive is a one-time process. If you ever have to reinstall Interplay Central Playback services, you will not need to repeat this procedure.

Accessing the BIOS

The Interplay Central playback server hardware is frequently shipped with BIOS settings set to Power-Saving mode. Interplay Central Playback services are CPU and memory intensive processes, especially when under heavy load. Avid recommends, for better performance, you ensure that your server is set to operate at Maximum Performance.



While the procedure explained in this section can be done before or after installation of services, Avid recommends it be completed immediately.

To start the server and access the BIOS to check settings:

1. Power up the server.
2. When the console displays the splash image with an option to enter the Setup menu, press F9.

The main screen of the ROM-Based Setup Utility appears and displays a long list of system-specific options, one of which is called Power Management Options.

You can use the Up Arrow or Down Arrow keys to select an option and press the Enter key to view or modify any of the options.

3. Select Power Management Options.

Over the main screen, the options for power management appear.

4. Select HP Power Profile.

A list of settings for the HP Power Profile appears, which are:

- Balanced Power and Performance
- Minimum Power Usage
- Maximum Performance
- Custom

5. Use the Up Arrow or Down Arrow keys to highlight Maximum Performance. Then press Enter to save your selection as the new configuration setting.

You are returned to the previous list of options.

6. Press Escape to return to the main menu of system-specific options.



If you are ready to run the Interplay Central installer, make sure you insert the USB drive into the server's USB port before you exit the ROM-Based Setup Utility.

7. Press F10 to save and exit the utility program. The server will reboot with the new configuration settings.

Booting Server from USB drive and Running the Installer

The Interplay Central Playback services installation process installs the Red Hat operating system and all necessary Avid software components. It is almost completely automated, although there is some configuration you will need to do during the process.

To boot the server from the USB drive and run the installer:

1. Insert the USB drive.
2. Power on the server.

The Welcome screen will appear, displaying the Red Hat logo and a list of options. The first, Install or upgrade an existing system, is selected by default.

3. Accept the default by pressing Enter.



The first option is used automatically if you do nothing and wait sixty seconds.

The Red Hat operating system packages are installed; this will take 5-to-10 minutes. After the process is complete, you will be prompted to reboot.

4. **Do not press Enter.** First, remove the USB drive from the server, and then press Enter.

If you press Enter by mistake, remove the USB drive as quickly as possible and before the system boots up again.

Rebooting the server triggers the first-time boot-up on the system drive. The Text Mode Setup Utility appears, displaying the Choose a Tool menu.

5. Use the Tab key to navigate down the menu.
6. Press Enter to select Keyboard configuration and run the tool.

The Keyboard Selection menu appears.

7. Again using the Tab and Enter keys, select the language option for your keyboard.

You are returned to the Choose a Tool menu.

8. Select the Network configuration option.

The Select Action menu appears.

9. If you are setting up a cluster of Interplay Central playback servers, or if you want to set up a static IP, choose the Device configuration option. Static IP is required when setting up a load balanced cluster of servers. Press Enter.

The Select A Device menu appears, displaying a list of network interface ports.

10. Choose the device option corresponding to eth0.

- For GigE connections to the network and ISIS, you must select the Intel Corporation 82545EM (or similar) device on eth0.

- For 10GigE connections to the network and ISIS, you must select the Myricom device on eth0.
 - Do not select any Broadcom device; these are on-board GigE ports that are not supported by ISIS.
11. Press Enter to save your selection.

The Network Configuration screen appears, letting you enter important configuration settings.
 12. Enter the network device information in the corresponding fields:
 - a. Keep the default name: eth0.
 - b. Keep the default device: eth0.
 - c. Press the spacebar to disable DHCP.
 - d. Enter the playback server's static IP address.
 - e. Enter the network's default gateway IP address.
 - f. Enter the IP addresses for the primary and secondary DNS servers.
 13. Select OK and press Enter.

You are returned to the Select A Device menu.
 14. Select Save and press Enter.

You are returned to the Select Action menu.
 15. Select the DNS configuration option.

The DNS Configuration screen appears, letting you enter important DNS settings.
 16. Enter the DNS information in the corresponding fields:
 - a. Enter the hostname for the DNS server. Syntax: *<machine name>*
 - b. Re-enter the IP addresses for the primary and secondary DNS servers.
 - c. Leave the tertiary DNS server field blank, if there isn't one.
 - d. If you did not disable DNS, you must enter the DNS search path domain.
 17. Select OK and press Enter.

You are returned to the Select Action menu.
 18. Select Save & Quit and press Enter.

You are returned to the Choose a Tool menu.
 19. Select Quit and press Enter.

You will be prompted to log in to the server.
 20. Log in with root credentials.



When configuring the Interplay Central playback server at the Linux console, you do not need to create a special user account. Use the Root account. The default password is Avid123.

21. At the prompt, enter **date** to check the date and time of the operating system.

The date and time will appear. If necessary, adjust the date by entering the date command again from the command prompt with the proper date in the format MMDDhhmm [[CC] YY] .
For instance, type: **date 10041103**

The correct date and time you set will appear.

22. At the prompt, enter: **service network restart**
23. If setting up a cluster of servers, repeat this procedure for each playback server.

You are now ready to configure the Interplay Central Playback services.

Configure the Interplay Central Playback Service

When you are ready to configure the Playback service, you can do so from any computer on the network with a browser, by signing in to the service's Web-based user interface, known as the ICPS Configuration portal.



Avid recommends using the Google Chrome browser, but any are supported. However, do not use multiple tabs in the browser to configure preferences as this may impact your ability to save modifications.

To configure the Interplay Central Playback service:

1. Log in to the ICPS Configuration portal. For more information, see [“Log in to ICPS Configuration Portal” on page 67.](#)
2. Configure the Interplay Preferences. For more information, see [“Configure Preferences for Interplay” on page 68.](#)
3. Configure the ISIS Preferences. For more information, see [“Configure Preferences for ISIS” on page 70.](#)
4. Configure the load balancer. For more information, see [“Configure the Load Balancer for the Playback Server” on page 71.](#)

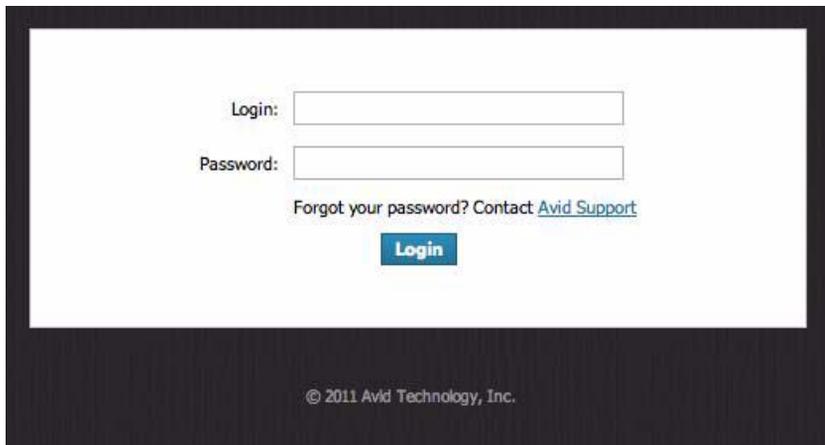
Log in to ICPS Configuration Portal

You need access to a computer with a Web browser and network access to the Interplay Central playback servers you are configuring. After logging in, you will have the opportunity to customize your Interplay Central Playback services administrator's account, such as changing the password.

To log in to the ICPS Configuration portal:

1. Open a browser.
2. Enter the hostname of the Interplay Central playback server you want to configure. The syntax is: `http://<hostname>`

The login screen appears.



3. Log in for the first time with root credentials, which are case sensitive:

User name: **Administrator**

Password: **Avid123**



You can change the default password for the root account later by clicking the Change Password link in the top right corner of the Web page.

Enter a new password, twice in the fields provided, and click Submit. A message appears to indicate when the password is successfully changed.

Configure Preferences for Interplay

Interplay Central Playback services work with Interplay Production. Although Interplay Central users sign in with their own credentials and use their own Interplay credentials to browse media assets, the Interplay Central Playback services use a separate set of Interplay credentials to resolve playback requests and check-in voice-over assets recorded by Interplay Central users.

Therefore, a unique set of user credentials are required for Interplay Central Playback services. The set should have the following attributes:

- Be an Interplay administrator account
- Not be used or shared with any human users
- Have permission to read all folders in the workgroup
- Have a user name that indicates the purpose of the user credentials. Avid recommends something like: icps-interplay.

To configure preferences for Interplay:

1. Log in to the ICPS Configuration portal. For more information, see [“Log in to ICPS Configuration Portal”](#) on page 67.

By default, the Interplay tab is displayed at login.

The screenshot shows the 'Preferences :: Interplay Central' window. At the top right, there is a user profile icon labeled 'Administrator' with links for 'Change Password' and 'Logout'. Below the title bar, there are four tabs: 'Interplay' (selected), 'ISIS', 'Load Balancer', and 'Logs'. The main content area is divided into three sections:

- Interplay Credentials:** Contains three text input fields labeled '* Host:', '* User:', and 'Password:'.
- Workgroup Properties:** Contains three text input fields labeled 'MI Host:', 'WG Name:', and 'Lookup Servers:'.
- At the bottom of the Workgroup Properties section, there is a checked checkbox labeled 'Enable Dynamic Relink' and a blue 'Save' button.

At the bottom of the window, the copyright notice reads: © 2011 Avid Technology, Inc.

2. Do the following in the Interplay Credentials section:
 - a. In the Host field, type the hostname of the Interplay Engine.
 - b. In the User field, type the name of the Interplay user account reserved for Interplay Central Playback services.
 - c. In the Password field, type the password for the user account.
3. Do the following in the Workgroup Properties section:
 - a. In the MI Host field, type the hostname (or IP address) for the Media Indexer. For multiple Media Indexer services, use the following syntax:
`<hostname>;<hostname>;<hostname>`
 - b. In the WG Name field, type the name of the Interplay workgroup, which is case sensitive.
 - c. In the Lookup Servers field, type the hostnames (or IP addresses) for the computers running the Lookup services. The syntax is: `<hostname>;<hostname>;<hostname>`
4. Make sure the Enable Dynamic Relink is checked so that communication with Media Indexer is enabled. Dynamic Relink is required for multi-resolution workflows.
5. Click Save.

Configure Preferences for ISIS

Interplay Central Playback services use a separate set of ISIS credentials to read media assets for playback and to write audio assets for voice-over recorded by Interplay Central users.

Therefore, a unique set of user credentials are required for Interplay Central Playback services. The set should have the following attributes:

- Be an ISIS administrator account
- Not be used or shared with any human users
- Have permission to read all workspaces, and to write to the workspace flagged as the VO (voice-over) workspace
- Have a user name that indicates the purpose of the user credentials. Avid recommends something like: icps-isis.

To configure the preferences for ISIS:

1. Log in to the ICPS Configuration portal. For more information, see [“Log in to ICPS Configuration Portal” on page 67](#).
2. Click the ISIS tab.

The screenshot displays the 'Preferences :: Isis' configuration page in the ICPS Configuration Portal. The page has a dark header with a purple play button icon on the left and a user profile icon with the text 'Administrator | Change Password | Logout' on the right. Below the header, there are four tabs: 'Interplay', 'ISIS' (which is selected and highlighted in blue), 'Load Balancer', and 'Logs'. The main content area is titled 'Isis' and contains several configuration fields:

- * Host: [Text Input Field]
- * User: [Text Input Field]
- Password: [Text Input Field]
- Remote Host:
- System Directors: [Text Input Field]
- i Syntax is server1;server2;server3
- Use IFNames: [Text Input Field]
- Ignore IFNames: [Text Input Field]
- i Syntax is Ifname;Ifname
- Client Mode: [Dropdown Menu] (Current selection: 1Gb Connection)

A blue 'Save' button is located at the bottom center of the configuration area. At the very bottom of the page, the copyright notice '© 2011 Avid Technology, Inc.' is visible.

3. Enter the following:
 - a. In the Host field, type the hostname (or IP address) of the ISIS shared storage server.
 - b. In the User field, type the name of the ISIS user reserved for Interplay Central Playback services.
 - c. In the Password field, type the password for the user account.
4. If your connection to ISIS is via Zone 2 (through a switch as opposed to a direct connection in Zone 1), enable Remote Host. Then in the System Directors field, type the IP addresses for the ISIS System Directors, using the following syntax:


```
<IP address>;<IP address>;<IP address>
```
5. In most cases, the only network connection for the Interplay Central playback server will be a single GigE or a 10GigE connection. This is the connection for both the ISIS and to the network for outbound compressed playback media. If you have other network connections, you must indicate which of them are used by ISIS as opposed to other network activity.
 - a. In the Use IFNames field, enter the network device ID (usually eth0) used by ISIS.
 - b. In the Ignore IFNames field, enter all other active network devices *not* used by ISIS, such as eth1, eth2, etc.
6. Set the Client Mode to:
 - ▶ 1 Gb Connection—for 1 GigE connections
 - ▶ 10 Gb Connection—for 10 GigE connections
7. Click Save.

Configure the Load Balancer for the Playback Server

Interplay Central playback servers can be clustered to provide redundancy and scalability. You can cluster up to 16 nodes.

Interplay Central playback server clusters require no specific load balancing hardware, just the servers that comprise the cluster. One server operates as a playback server and a load balancer, distributing user connections to the other nodes in the cluster evenly.



Clustering Interplay Central playback servers is a load balancing solution, not a high availability solution. Although playback server nodes can fail and sessions will be redirected to operational nodes, there is a risk that the master node fails and all sessions are interrupted until the master node is restored.

Setting up and maintaining a cluster of playback servers involves a few procedures:

To set up load balancing and maintain a cluster of playback servers:

1. Ensure the playback server that will be the master node is installed, connected to ISIS, and configured properly. For more information, see [“The Master Node” on page 72](#).
2. Define a master node for playback nodes. The procedure is on [page 72](#).
3. Confirm the master node’s cluster list by following the procedure on [page 73](#).
4. If you need to add a node to an existing cluster, do the steps on [page 73](#).
5. If you need to remove a dead node from an existing cluster, do the steps on [page 74](#).

The Master Node

Before you can define the master node and set up a cluster, the playback server that will be the master node must be fully installed with connections to ISIS. It is not necessary to configure the nodes using the ICPS Configuration portal, although they too must be connected to the ISIS (in Zone 1 or Zone 2).

The Interplay and ISIS preferences must be configured for the playback service on the server that is the master node, because these settings will be automatically passed to the other playback nodes when you set up the cluster. For more information, see [“Configure the Interplay Central Playback Service” on page 66](#).

Defining a Master Node for Playback Nodes

You must edit a system configuration file to define the hostname or IP address of the master node to add a node to a cluster. The following procedure must be done on each playback server, except the one designated as the master node.

To define a master node for playback nodes:

1. Log in to the playback node using the server’s root credentials.
2. Open the file `/etc/sysconfig/avid-common-params` in a text editor.
3. Remove the pound sign (`#`) from the first line of the file to uncomment it.

The line should read: `export AVID_CONFIG_HOST="localhost"`

4. Change `"localhost"` to the hostname or IP address of the master node.

The line should read: `export AVID_CONFIG_HOST="master hostname"` where *master hostname* is the real name or IP address of the master node.

5. Save and close the file.
6. In a shell, as root, restart all Interplay Central Playback services. For more information, see [“Restart Interplay Central and ISIS Services” on page 74](#).

Confirming the Master Node's Cluster List

After you have completed the previous procedure for all playback nodes (except the master node), navigate to the Configuration portal of the master node to confirm the cluster node list.

To confirm the cluster node list:

1. Log in to the ICPS Configuration portal. For more information, see [“Log in to ICPS Configuration Portal” on page 67](#).
2. Click the Load Balancer tab.

All of the nodes for which you defined a master node in the previous procedure appear in the list.



If only the master node appears, click Update.



3. Click the Show Sessions icon in a node's row to view its current connection(s).

A list of that node's connections will appear for you to review.

Adding a Node to an Existing Cluster

You can add a node to a cluster at any time.

To add a node to an existing cluster:

1. Log in to the playback node—the one you want to add—using the server's root credentials.
2. Open the file `/etc/sysconfig/avid-common-param` in a text editor.
3. Remove the pound sign (`#`) from the first line of the file to uncomment it.

The line should read: `export AVID_CONFIG_HOST="localhost"`

4. Change “localhost” to the hostname or IP address of the master node.

The line should read: `export AVID_CONFIG_HOST="<master hostname>"` where `<master hostname>` is the real name or IP address of the master node.

5. Save and close the file.
6. In a shell, as root, restart all Interplay Central Playback services. For more information, see [“Restart Interplay Central and ISIS Services” on page 74](#).
7. Confirm the addition of the node to the cluster by logging in to the ICPS Configuration portal. For more information, see [“Log in to ICPS Configuration Portal” on page 67](#).
8. Click the Load Balancer tab.

The added node should appear in the list.



If you do not see the node, click Update.

Removing a Dead Node from an Existing Cluster

If a node fails, it might not be properly removed from the node list, which means the master will still attempt to send connections to the dead node. Although these connections will eventually find an operational node, keeping the dead node in the list can cause unnecessary delays. You should remove any dead node from the node list until it has been serviced and restored.

To remove a dead node:

1. Log in to the ICPS Configuration portal.
2. Click the Load Balancer tab.
3. Do one of the following:
 - ▶ If you know which node is dead, click the Remove Node icon in the row of the node you want to remove.
 - ▶ Click Reset Settings. This will remove all nodes from the cluster list. Active nodes will re-add themselves after a few seconds. Clients connected to active nodes will not be affected. Clients connected to any dead nodes will be redirected to active nodes.

Restart Interplay Central and ISIS Services

After completing the installation and configuration of the playback server, restart the services.

Restart all services, including those for ISIS, from the Linux console's command prompt.

To restart Interplay Central and ISIS services:

1. Log in to the root account.
The command prompt will appear, ending with a pound sign (#).
2. Type: `service avid-all restart` and press Enter. This command restarts all Interplay Central Playback services.
3. Type: `service avid-isis restart` and press Enter. This command restarts all ISIS services.

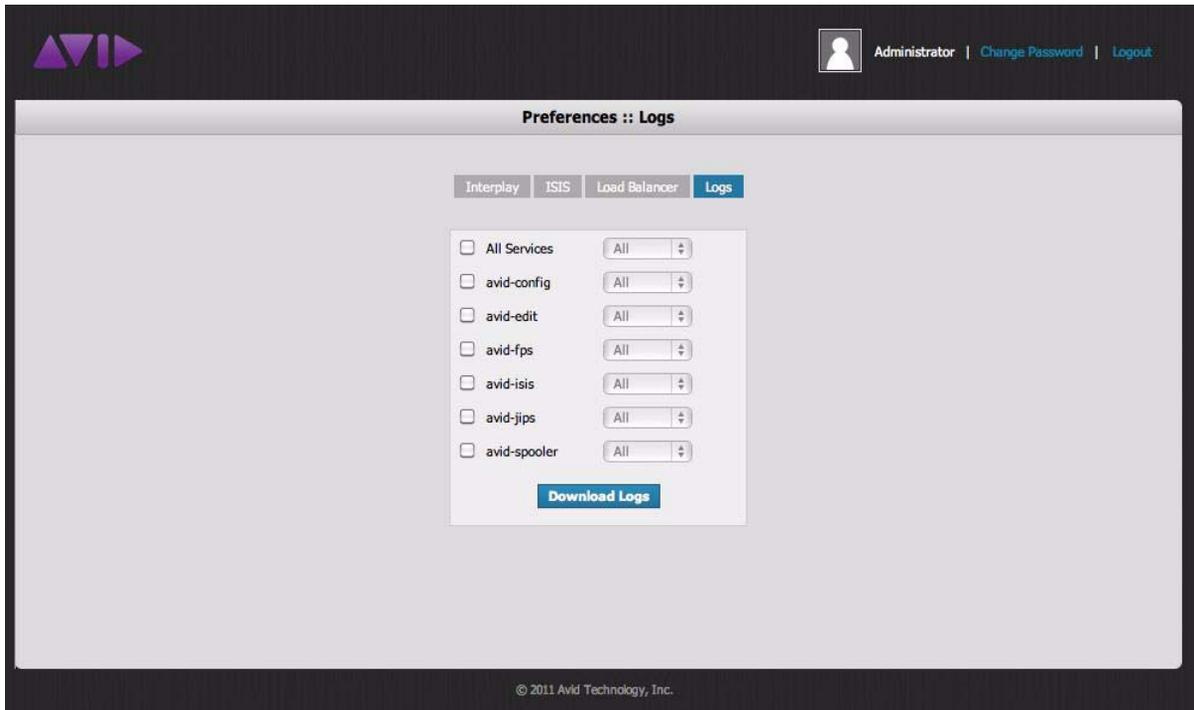
After restarting the services, you can test connectivity by signing in to Interplay Central and trying to load video into the Media pane.

Retrieve Interplay Central Playback Service Logs

This procedure is not required at installation, but as you use Interplay Central you might encounter performance or playback issues. You should report these occurrences to Avid. When you do, Avid Customer Success personnel might ask you to retrieve system and component logs from your Interplay Central playback server(s).

To retrieve Interplay Central playback service logs:

1. Log in to the ICPS Configuration portal. For more information, see [“Log in to ICPS Configuration Portal”](#) on page 67.
2. Click the Logs tab.



3. Check the box(es) next to the log(s) you want to retrieve.
4. Choose one of the following:
 - ▶ All—to retrieve all logs of the corresponding type.
 - ▶ Current—to retrieve only the latest log since last server restart.
5. Click Download Logs.

The logs are downloaded to the computer you are using as a .zip file. Inside the .zip file is one .log file for each requested log.

Changing Compression Level Configuration

By default, Interplay Central playback server uses compression levels of 40 for good (low), 60 for better (medium), and 80 for best (high). If you want to customize these levels for your site, you can do so by editing the application’s properties on the playback server(s).



System application.properties are located at:

C:\Program Files (x86)\Avid\Interplay Central\Server\config.

However, changes to the configuration settings of this file can be lost after updates are installed.

To customize compression level configuration settings for Interplay Central:

1. Go to C:\ProgramData\Avid\AvidInterplayCentralService\config.
2. Open the custom application.properties file. If it does not exist you will have to create it.

The line to add or look for is:

```
com.avid.central.Player.compressionLevels={Low\:40, Medium\:60,  
High\:80}
```

Low, Medium, and High in the configuration settings correspond to options available to Interplay Central users. In the user interface, the options are called: Good, Better, and Best, respectively.

3. Modify the numerical values in that line accordingly and save your changes.



Take care when modifying the values. A typo, such as a missing colon (:), will affect playability of assets in the Media pane.

4 The Mobile Application

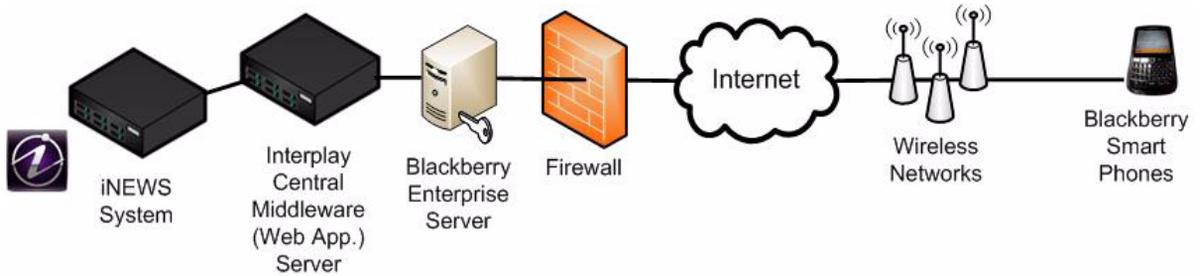
The Interplay Central mobile application is a native user interface designed to run on your BlackBerry® smart phone and enable direct, secure access to your station's iNEWS newsroom computer system.

The following main topics describe the installation and configuration procedures necessary for the Interplay Central mobile application.

- [Connection Basics](#)
- [Checklist: Before You Begin](#)
- [iNEWS Configuration for Mobile Integration](#)
 - [Editing SYSTEM.CLIENT.MOBILE-VERSIONS](#)
 - [Editing SYSTEM.CLIENT.MOBILE-IDS](#)
 - [Adding Mobile Devices to the iNEWS Configuration File](#)
- [Install Interplay Central on the Blackberry](#)

Connection Basics

The following image shows a basic illustration of how a Blackberry mobile device securely connects to an iNEWS newsroom computer system.



There are various connection options available when using the Interplay Central mobile application:

- WiFi
- Direct TCP (Carrier specific APN)
- MDS or Blackberry Enterprise Server (BES)
- Blackberry Internet Services (BIS)
- WAP 2.0



The application is designed to automatically select the first available connection from the list of options according to the priority shown in the list.

Avid requires the use of a Blackberry Enterprise Server. If your site does not plan to use a signed certificate for the the Interplay Central middleware server then users will need to configure their Blackberry devices to use the untrusted certificates by going through Advanced security settings (Proxy TLS) on each handheld.

Checklist: Before You Begin

Before you can enjoy the full functionality and freedom of Interplay Central mobile integration with iNEWS newsroom computer system, you will need to gather some important information and have it at the ready. For convenience, you can print the following table and fill in the information unique to your site.

Type of Information Needed	Site Specific Notes
PINs from each Blackberry device	
The hostname of the Interplay Central middleware (Web application) server	

Then ensure the following tasks are completed.

<input checked="" type="checkbox"/>	Tasks	Refer to...
<input type="checkbox"/>	Configure iNEWS for licensed integration with the Interplay Central mobile application.	“iNEWS Configuration for Mobile Integration” on page 79
<input type="checkbox"/>	Install Interplay Central on the mobile device(s).	“Install Interplay Central on the Blackberry” on page 83

iNEWS Configuration for Mobile Integration

Before you can connect to an iNEWS newsroom computer system from a device running the Interplay Central mobile application, you must edit a couple of system files in iNEWS so that iNEWS recognizes the Interplay Central mobile application as a properly licensed device.

The files to edit are:

- SYSTEM.CLIENT.MOBILE-VERSIONS
- SYSTEM.CLIENT.MOBILE-IDS
- iNEWS configuration file

Editing SYSTEM.CLIENT.MOBILE-VERSIONS

Some steps in the following procedure are conducted at the iNEWS console in superuser mode. For more information, see “The iNEWS Console” chapter in the *iNEWS Installation and Configuration Guide*.

To edit the SYSTEM.CLIENT.MOBILE-VERSIONS story in iNEWS:

1. Sign in to an iNEWS workstation as a system administrator, or any user account with write access to the System directory.
2. Navigate to SYSTEM.CLIENT.MOBILE-VERSIONS and open the first story in that queue.
3. On a new line, add the version of the Interplay Central mobile application that will run on the mobile device.
4. Save the story.
5. Reconfigure the system. From the iNEWS console:
 - a. Select the master computer, which is typically server A.
 - b. Enter superuser mode, using the correct password.
The dollar sign (\$) at the end of the console's server prompt will change to a pound sign (#).
 - c. Take the system offline by typing: NRCS-A# **offline**
 - d. Reconfigure the system by typing: NRCS-A# **configure**
 - e. When the prompt reappears, bring the system back online by typing: NRCS-A# **online**
 - f. Press Ctrl+D to leave superuser mode.
The pound sign (#) at the end of the console's server prompt will change back to a dollar sign (\$).

Editing SYSTEM.CLIENT.MOBILE-IDS

A user can securely connect to an iNEWS newsroom computer system from any location with cellular service by using a Blackberry smart phone that is running the Interplay Central mobile application, but only if the personal identification number for that phone is recognized by the iNEWS system.

Some steps in the following procedure are conducted at the iNEWS console in superuser mode. For more information, see "The iNEWS Console" chapter in the *iNEWS Installation and Configuration Guide*.

To edit the SYSTEM.CLIENT.MOBILE-IDS story in iNEWS:

1. Sign in to an iNEWS workstation as a system administrator, or any user account with write access to the System directory.
2. Navigate to SYSTEM.CLIENT.MOBILE-IDS and open the first story in that queue. If it does not exist, you will have to create it in the iNEWS database.

3. Add the personal identification number (PIN)—one per line—for each mobile device that will use the Interplay Central mobile application to connect to iNEWS. Use a semicolon to add helpful commentary for future reference to the end of the line.

For instance, type: `32145AZ0 ; News director's cellphone`



On a Blackberry smart phone, you can locate your PIN by navigating to Options > Status.

4. Save the story.
5. Reconfigure the system. From the iNEWS console:
 - a. Select the master computer, which is typically server A.
 - b. Enter superuser mode, using the correct password.
The dollar sign (\$) at the end of the console's server prompt will change to a pound sign (#).
 - c. Take the system offline by typing: `NRCS-A# offline`
 - d. Reconfigure the system by typing: `NRCS-A# configure`
 - e. When the prompt reappears, bring the system back online by typing: `NRCS-A# online`
 - f. Press Ctrl+D to leave superuser mode.

The pound sign (#) at the end of the console's server prompt will change back to a dollar sign (\$).

Adding Mobile Devices to the iNEWS Configuration File

The configuration file (`/site/config`) lists all devices, servers, and resources configured to run on your iNEWS newsroom computer system and how they are connected. If a device is not in the configuration file, the system will not know about it and cannot use it.

The following procedure is conducted at the iNEWS console. For more information, see “The iNEWS Console” and “System Configuration” chapters in the *iNEWS Installation and Configuration Guide*. Also, some steps require use of `ed`, the line editor. If you do not know how to use the line editor to modify lines in the file, please see “The Line Editor, `ed`” in the *iNEWS Installation and Configuration Guide*.

To edit `/site/config` for the Interplay Central mobile application:

1. Select all servers.



Whenever you make changes to any iNEWS site file, such as the configuration file, be sure to select all servers in your system at the console. Unlike database stories, site files are not automatically mirrored from one computer's disk to another.

2. Type: `ed /site/config`

After you press Enter, the editor responds by displaying a numerical value indicating the file size expressed as the number of characters, including spaces and returns.

The configuration file has two major sections: the host section and the device section. For Interplay Central mobile integration, you must edit both.

3. In the host section, add a resource list entry.

The format is: `reslist <device # or range> ; <comments>`

For instance: `reslist 2001:2005 ;Interplay Central mobile applications`



For dual or triple server systems, the configuration file will have multiple host sections to define which server handles which devices under various circumstances. Resource list entries should be added to each host section.

4. In the device section, add a resource line for the mobile devices.

The format is: `mb1 <device # or range> - gnews <device name> ;<comment>`

For instance: `mb1 2001:2005 - gnews - ;Interplay Central mobile applications`

5. Type `w` to write (save) your changes to disk.



Do not use an uppercase `W` in this step. Uppercase `W` will append the file you're editing to the existing file. The resulting file may be unreadable and will lead to problems with running your iNEWS system.

6. Type `q` to quite the line editor.

7. (Optional) Use the configure command to test your configuration changes.

The syntax is: `configure /site/config <system> <computer>`

For instance, type: `configure /site/config ab a`

When prompt returns, the configuration file has been checked. If the system detects any errors, it displays appropriate bad configuration messages.

8. Reconfigure the system. From the iNEWS console:

- a. Select the master computer, which is typically server A.

- b. Enter superuser mode, using the correct password.

The dollar sign (\$) at the end of the console's server prompt will change to a pound sign (#).

- c. Take the system offline by typing: `NRCS-A# offline`

- d. Reconfigure the system by typing: `NRCS-A# configure`

- e. When the prompt reappears, bring the system back online by typing: `NRCS-A# online`

- f. Press `Ctrl+D` to leave superuser mode.

The pound sign (#) at the end of the console's server prompt will change back to a dollar sign (\$).

Install Interplay Central on the Blackberry

The following procedure assumes licensing, setup, and configuration of the Interplay Central and iNEWS servers have already been completed.

To install Interplay Central on the Blackberry device:

1. Open the phone's browser.
2. Navigate to the Blackberry folder on your site's Interplay Central middleware (Web application) server by typing the URL in the following format:

`<hostname>/bb/`

For instance, if your server's hostname is InterplayCentral-A, then you would type:

InterplayCentral-A/bb/

3. If prompted about "different domain name", click Continue.



Some messages mentioned in this procedure might not appear during every installation.

4. The following message might appear:

You are attempting to open a secure connection, but the server's certificate is not trusted.

If you receive this message, click Continue.

5. A Web page appears similar to the one shown in the following illustration:



Click the link provided on the Web page to download the native Blackberry mobile application for Interplay Central.



If the page does not appear, or you receive an “Access Denied: Insecure SSL Request” error, you will need to modify the security settings (Proxy or Handheld TLS) on your Blackberry to allow for the Interplay Central middleware server to be a trusted host. For more information, see “Modifying Your Phone’s Security Settings” on page 84.

6. When the Download Interplay Central screen appears, click Download.

A progress bar appears during the download after which a second dialog will appear once the application is installed successfully.

7. Click OK.



When the Interplay Central mobile application is installed on your smart phone, an icon representing the application is also installed. Depending on the version of Blackberry operating system, the icon can be found on the main menu of applications or in the Download folder. It can also be moved elsewhere like icons for any other BlackBerry applications.



The first time you start the application, you will be prompted with the following message: “Would you like to grant Interplay Central trusted application status?” Select Yes.

Modifying Your Phone’s Security Settings

If the Interplay Central middleware server is not updated with a signed certificate, then the security settings (Proxy or Handheld TLS) for each BlackBerry handheld must be modified to allow for the server to be a trusted host.

To add a trusted host:

1. On your Blackberry, press the Menu button.
2. Select Options.
3. Select Security Options.
4. Select Advanced Security Options.
5. Select TLS.
6. Set TLS Default to Proxy.
7. Press the Menu button.
8. Select Add Host.
9. Enter the host name for the Interplay Central middleware (Web application) server.
10. Click OK.

11. Press the Back button.
12. Click Save, when prompted, to save the new settings.

Interplay Central Glossary

A

Administrators group

A default group used for Interplay Central user management that contains users with administrative privileges.

asset

An object that you can use to create stories and sequences. There are different types of assets, such as video media, audio media, graphics, images, and text. Asset usually refers to objects or also lists of objects, such as rundowns, that are stored in an asset management database.

Asset mode

If you click the Asset button in the Media pane, you can view media for the currently loaded asset and use controls that apply specifically to assets, such as controls for setting In and Out points. Compare with the definition of [Output mode](#).

Assets pane

A pane in the client application that displays assets. These assets can result from a search or from browsing. Assets are displayed in a folder hierarchy, if applicable to the assets displayed.

authentication provider

A server that checks the credentials (user name and password) of a user and allows access. An Interplay Central administrator designates an authentication provider for imported users, such as a Windows Domain server.

B

Basic layout

A layout that a journalist uses to edit and create stories. You can view media in this layout but you cannot add video or audio to the story.

C

Contacts list

In the Message bar, a list of iNEWS users from which you can select a recipient of a message.

Cue List

The area in the Script Editor in which the journalist adds or edits production cues and machine control events, such as those for a character generator (CG).

D

Details pane

A pane in the Users layout and the System Settings layout that displays information and settings for a selected item.

drop zone

The part of an area into which you can move a pane. Each area has five drop zones: center, top, bottom, left, and right.

E

edit while capture (EWC)

See Frame Chase editing.

F

Frame Chase editing

A feature that lets you view and edit media while it is being captured from a line feed or ingest device. Also known as edit while capture (EWC).

I

Imported group

A default group used for Interplay Central user management that contains users imported from a Windows domain.

in-progress clip

A clip that is in the process of being captured. You can use in-progress clips in Frame Chase editing.

Interplay Central middleware server

A Web-application server used to manage communications between Interplay Central workstations and back-end systems.

Interplay Central Distribution service

A service used to coordinate jobs with Avid Media Services for sequence mixdowns and send to playback.

Interplay Central User Management service

A service that provides the ability to create and manage users and groups and authenticate users across multiple systems.

Interplay Central playback server

A Linux[®] based server that runs the Interplay Central Playback service. It concurrently reads multiple media assets and sequences residing on an ISIS, and compresses that media for playback on Internet-connected clients.

J

J-K-L play

The J-K-L keys on the keyboard allow you to play and shuttle through media at varying speeds. This feature is also referred to as *three-button play* or *variable-speed play*.

L

Launch pane

A pane in the client application from which you navigate to various locations. This pane displays remote file systems, local file systems, and other locations for assets.

Layout

A collection of panes designed for a specific purpose, such as a layout for journalists or a layout for administrators.

Layout selector

A list from which you select the layout that you want to work in.

L-cut

A split edit between two clips in which the video transition and the audio transition do not occur simultaneously. The audio transition can occur before the video transition or the video transition can occur before the audio transition.

locator

A frame-specific marker that a user can add when logging media. Locators are displayed in the Media Timeline and locator text is displayed as an overlay in the Media viewer.

M

master clip

A media object that contains pointers to media files in which the actual digital video and audio data is stored.

Match Frame

A feature that lets you load a source clip, a portion of which is contained in a sequence.

Media controls

In the Media pane, controls that let you play and move through an asset and edit an asset for use in creating a sequence. Which controls are displayed depends on the selected asset.

Media pane

A pane in the client application in which you can view and edit media assets, using the Media controls.

Media viewer

The section of the Media pane used to view an asset.

Media Timeline

In the Media pane, a graphical representation of the length and time spans of an asset or sequence.

Message bar

A section of the client application in which you can send and receive messages. The Message bar consists of the To field, the Message field, and the Send button.

Menu bar

A section of the client application from which you can select various menu options.

Message History

In the Message bar, arrow buttons are provided to let you read recent messages. A numerical indicator appears when multiple unread messages exist.

metadata

Data that describes an asset. Metadata includes properties, reservations, restrictions, and other information.

mixdown

A process in which multiple video tracks, multiple audio tracks, and effects are combined into a new master clip with one video track and a reduced number of audio tracks.

N

NAT (natural sound)

Audio recorded at the same time as the video, often by a microphone built in to a camera. Compare with the definition of [SOT \(sound on tape\)](#).

O

Output mode

If you click the Output button in the Media pane, you can view media for the currently loaded script sequence and use controls that apply specifically to script sequences, such as voice-over controls. Compare with the definition of [Asset mode](#).

P

pagination

A system setting that specifies the maximum number of items listed in the Queue/Story pane or the Project/Story pane.

pane

An area can contain one or more panes. Multiple panes are layered within an area with the names of each pane appearing on tabs that the user can select to view.

position indicator

A vertical bar in the Media Timeline that indicates the location of the frame displayed in the Media viewer. You can drag the position indicator to scrub through a clip or sequence.

Progress pane

A pane in the client application that displays the progress and status of Interplay Central processes such as sequence mixdown and send to playback.

Project/Story pane

A pane in the client application that displays the contents of a project, its facets, and any associated stories.

Q

Queue/Story pane

A pane in the client application that displays the contents of a queue with the contents of the story, including the story form.

R

rundown

A lineup or timed list of scripts indicating the order in which they will be aired during a news program.

S

Script Editor

A section of the Queue/Story pane in which a journalist creates and organizes the elements of a script. There are four sub-sections of the Script Editor: Story Form, Cue List, Story, and Sequence Timeline.

script

A compilation of elements that include the story that is sent to the teleprompter and read on the air, any video and audio that is broadcast with the story, as well as production cues and machine control instructions associated with the story.

script sequence

A series of video, audio, and images that you compose in the Script Editor and play in the Media pane. Script sequences are saved in the Interplay Production database and can be sent to a playback device.

Search bar

A section of the client application in which you can conduct a search for assets that match specific criteria.

Search pane

1. A pane in the Basic or Video layout that lets a user search for information and assets.
2. A pane in the Users layout that lets an administrator search for Interplay Central groups and users.

Send button

In the Message bar, the button you click to send a message.

segment

1. In a rundown, a portion of the show aired between commercial breaks.
2. A portion of the story body/text. A journalist uses segments to time the text and integrate it with video, audio, and production cues. Multiple timed segments are combined to form the overall story.

send to playback (STP)

The process of transferring a sequence to a playback device or playout server for broadcast.

sequence

Video, images and audio clips, or any combination, arranged in a series.

Sequence Timeline

The area of the Script Editor in which a journalist adds, rearranges, or removes video and audio clips associated with the story.

Settings pane

A pane in the System Settings layout from which you can select a group of settings to view or edit.

shuttle

To view media at speeds slower or faster than real time. In Interplay Central you can use the J, K, and L keys to shuttle through a clip or sequence.

sightline

The yellow bar in the Sequence Timeline that acts as a position indicator when playing a script sequence in the Media pane.

SOT (sound on tape)

Audio recorded at the same time as the video, often by a microphone separate from the one built in to a camera. Compare with the definition of [NAT \(natural sound\)](#).

source clip

A video clip or audio clip that is used as part of a sequence.

story

The text that is read on air. Also, the Story section is part of the Script Editor in which a journalist writes a story or views the text of an existing story.

Story Form

A section of the Script Editor that provides story information in fields that are predetermined by the iNEWS system administrator for each queue in the database.

STP (send to playback)

The process of transferring a sequence to a playback device or playout server for broadcast.

subclip

A clip created by marking IN and OUT points in a master clip and saving the frames between the points. The subclip does not contain pointers to media files. The subclip references the master clip, which contains pointers to the media files.

System Settings layout

A layout that an Interplay Central administrator uses to specify various configuration settings.

T

Timecode displays

In the Media pane, displays that provide timecode information for the loaded asset or sequence.

Timing taglines

Horizontal lines with pale yellow tags that appear in the Sequence Timeline to display estimated read times for story segments.

trim indicator

In the Sequence Timeline, a mark that appears at the beginning or end of a clip in the video column or audio column when hovering over that area with the mouse pointer. You can trim video and audio together, or you can trim them separately to create an L-cut.

U

Unassigned group

A default group used for Interplay Central user management that includes users that were removed from a group but are not members of any other groups.

User Management service

A service that provides administrators with the ability to create and manage users and groups, and authenticate users across multiple products with a single user name and password.

User Tree pane

A pane in the Users layout that displays groups and users in a hierarchical layout.

Users layout

A layout for Interplay Central user management that an Interplay Central administrator uses to import, create, and manage users and group.

V

Video layout

A layout that a journalist uses to edit and create stories that include video and audio.

Voice-over controls

Controls that let you record a voice over and adjust its volume.

W

window

The primary user interface element of the application.

Z

zoom bar

In the Media pane, a control located below the Media Timeline that lets you enlarge a section of the Media Timeline so you can work more easily with long clips.

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