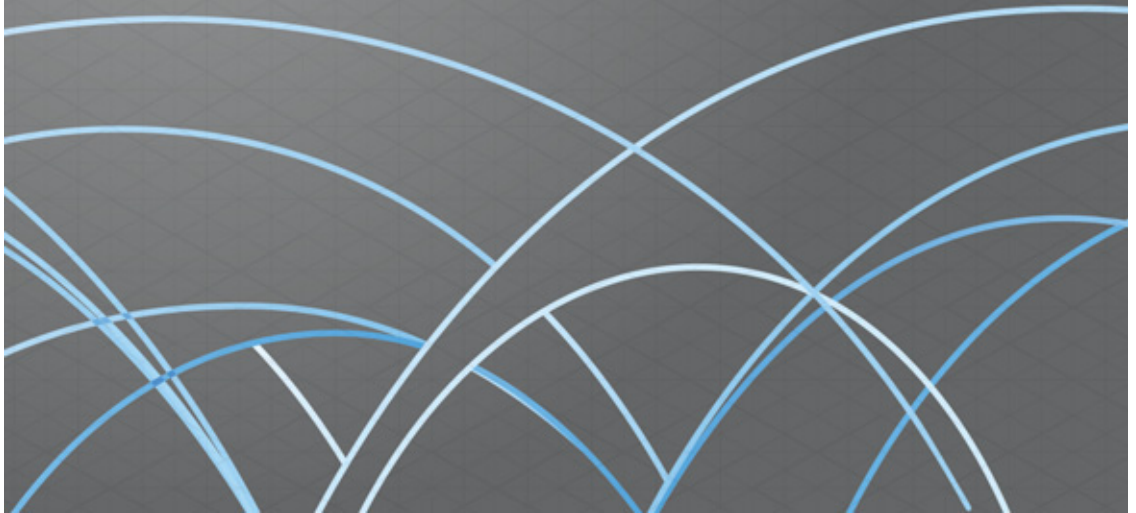




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BIRT iHub



## **Installing and Upgrading BIRT iHub on Linux**

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## Part 1

### Installing BIRT iHub

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# About Installing and Upgrading BIRT iHub on Linux

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*Installing and Upgrading BIRT iHub on Linux* includes the following chapters:

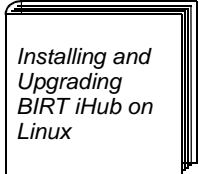



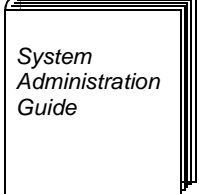
- *About Installing and Upgrading BIRT iHub on Linux.* Provides an overview of this guide and Actuate BIRT iHub documentation.
- *Part 1. Installing BIRT iHub.* Describes the process of setting up the environment and installing BIRT iHub modules on a Linux system.
- *Chapter 1. Installing BIRT iHub overview.* Describes the BIRT iHub modules and environment.
- *Chapter 2. Installing BIRT iHub.* Describes how to install BIRT iHub in a Linux environment.
- *Chapter 3. Setting up BIRT iHub.* Describes how to access System Console and Visualization Platform.
- *Part 2. Upgrading to BIRT iHub 3.1.1.* Describes the process of upgrading BIRT iHub Release 3 (including fix releases) or Release 3.1 to Release 3.1.1.
- *Chapter 4. Upgrading to Visualization Platform 3.1.1.* Describes the process of upgrading BIRT iHub Visualization Platform from Release 3 (including fix releases) or Release 3.1 to Release 3.1.1.
- *Chapter 5. Upgrading to System Console 3.1.1.* Describes the process of upgrading System Console from Release 3 (including fix releases) or Release 3.1 to Release 3.1.1.

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## Accessing Actuate BIRT iHub information

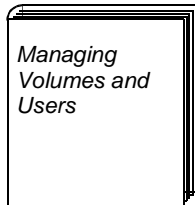

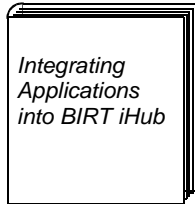
The online documentation includes the materials described in Table 1-1. You can obtain HTML and PDF files from the Actuate web site. These documentation files are updated in response to customer requirements.

**Table 1-1** BIRT iHub documentation

| <b>For information about this topic</b>                                                                                                            | <b>See the following resource</b>                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Installing BIRT iHub modules on Linux                                                                                                              |  <p><i>Installing and Upgrading BIRT iHub on Linux</i></p>        |
| Installing BIRT iHub modules on Windows                                                                                                            |  <p><i>Installing and Upgrading BIRT iHub on Windows</i></p>      |
| Installing multiple BIRT iHub modules on Linux                                                                                                     |  <p><i>Installing Multiple Modules on Linux Platforms</i></p>    |
| Installing multiple BIRT iHub modules on Windows                                                                                                   |  <p><i>Installing Multiple Modules on Windows Platforms</i></p> |
| Architecture overview<br>Using the default PostgreSQL RDBMS<br>Using an alternative RDBMS<br>Setting up a cluster<br>Backing up the metadata RDBMS |  <p><i>System Administration Guide</i></p>                      |



**Table 1-1** BIRT iHub documentation

| <b>For information about this topic</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>See the following resource</b>                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Managing volume-level operations<br>Setting up users and groups<br>Advanced job schedules<br>Using HTTPS to access Visualization Platform                                                                                                                                                                                                                                                                                                                                                                         |  <p><i>Managing Volumes and Users</i></p>              |
| Installing a stand-alone Visualization Platform<br>Configuring Visualization Platform<br>Configuring BIRT Viewers and Report Studio                                                                                                                                                                                                                                                                                                                                                                               |  <p><i>Installing Visualization Platform</i></p>       |
| Actuate web services and SOAP messaging overview<br>Actuate Information Delivery API operations and data types reference<br>Using Actuate JavaScript API to customize access to reports and report components<br>Reference for configuring BIRT Viewer and Report Studio<br>Reference for BIRT Viewer and Report Studio URIs<br>Using Java Report Server Security Extension (RSSE) APIs<br>Using logging, performance monitoring, and archiving features<br>Customizing the Actuate software installation process |  <p><i>Integrating Applications into BIRT iHub</i></p> |
| Late-breaking information and documentation updates                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Release notes and updated localization files posted on Actuate <a href="#">Support</a>                                                    |

## Obtaining documentation

Actuate provides technical documentation in PDF and HTML formats. You can download PDF or view HTML versions of the documentation from the following URL:

<http://www.actuate.com/documentation>

## **Obtaining late-breaking information and documentation updates**

The release notes contain late-breaking news about Actuate products and features. The release notes are available on the Actuate Support site at the following URL:

<http://support.actuate.com/documentation/releasenotes>

If you are a new user, you must first register on the site and log in to view the release notes.

## **Obtaining technical support**

You can contact Customer Support by e-mail or telephone. For contact information, go to the following URL:

<http://www.actuate.com/services/support/contact-support.asp>

## **Supported and obsolete products**

The Actuate Support Lifecycle Policy and Supported Products Matrix are available on the Actuate Support web site at the following URL:

<http://support.actuate.com/documentation/spm>

# Part One



## Installing BIRT iHub



# 1

## Installing BIRT iHub overview

This chapter contains the following topics:

- Understanding BIRT iHub installation
- Understanding the BIRT iHub installation environment

---

## Understanding BIRT iHub installation

This chapter describes the modules and components of BIRT iHub. The system administrator uses the BIRT iHub installation packages to install the Actuate modules described in Table 1-1.

**Table 1-1** Actuate BIRT iHub modules

| Module                           | Description                                                                                                                                                                      |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Console                   | A web-based tool for configuring, licensing, managing, and monitoring one or more BIRT iHub Systems.                                                                             |
| BIRT iHub Visualization Platform | A web application, server, and metadata database that provide access to dashboards, files, folders, and jobs in a volume. Supports viewing BIRT reports and using Report Studio. |

To reduce network traffic, install BIRT iHub on the same host machine as the BIRT iHub system database. Alternatively, install BIRT iHub and the metadata database on different machines to distribute processing across multiple machines.

The installation procedures install BIRT iHub using an evaluation license. After installation, the administrator specifies a purchased product license using System Console. For a complete understanding of configuring BIRT iHub licenses, including binding the BIRT iHub processes to particular processors in a multi-core machine, see *BIRT iHub System Administration Guide*.

### Overview of installation operations

When installing BIRT iHub, be sure to run the same versions of all products.

To install BIRT iHub, the system administrator performs the following operations:

- Downloads the installation package for System Console and for BIRT iHub Visualization Platform from the download site
- Unbundles each installation package
- Modifies the installation properties file to specify information such as the machine name and password for the machine where the administrator is installing the BIRT iHub modules
- Installs each BIRT iHub module by running the installation shell script each installation package contains

After performing the installation, the system administrator loads a license for purchased options.

## About installation components

BIRT iHub provides the common services used by all modules such as user management, activity logging, and the PostgreSQL RDBMS containing system metadata.

The BIRT iHub Visualization Platform module includes the following components:

- BIRT iHub System with a PostgreSQL relational database management system (RDBMS), including a default volume with sample BIRT designs and other documents
- Information Console, which provides an integrated user interface for viewing and editing BIRT dashboards and reports, and iHub Administration

The System Console module includes one component, System Console, which is the graphical user interface (GUI) for administering the BIRT iHub System.

## Storing cluster and volume metadata

BIRT iHub stores metadata containing system, cluster, and volume configuration information in a database. In the default installation, BIRT iHub uses the open-source, PostgreSQL RDBMS. iHub also supports using other RDBMS, such as Oracle or a pre-existing PostgreSQL instance.

After installation of the default system, the system administrator can run a utility to switch to an alternative RDBMS. For more information, see *BIRT iHub System Administration Guide*.

The database that contains BIRT iHub system, cluster, and volume metadata is a critical component of BIRT iHub System. To guard against data loss, the database administrator must back up the schema using the tools and resources of the third-party RDBMS.

For information about the recommended procedures to back up BIRT iHub cluster and volume schemas, refer to *BIRT iHub System Administration Guide*.

## Support for the metadata database

If you encounter a problem with the operation of the metadata database, Actuate will work with you to resolve it. For example, Actuate may take any or all of the following actions:

- Propose a change in your environment that avoids the problem.
- Make a change in Actuate's code to work around the problem.
- In the case of PostgreSQL, engage with the development community to obtain a patch.

- In the case of Oracle, help you to isolate the problem and report it to the vendor.

## Downloading the installation packages

Download the BIRT iHub installation packages from an Actuate download site using the URLs provided by e-mail.

---

## Understanding the BIRT iHub installation environment

The following sections provide supplementary information about the BIRT iHub installation environment.

### Running different releases on the same machine

A BIRT iHub 3 or 3.1 installation cannot coexist on the same machine with an earlier release of BIRT iHub or iServer.

### Understanding the Java Runtime Environment

The BIRT iHub installation program installs Java Runtime Environment 1.8. By default, BIRT iHub uses this JRE. If you want to use a different JRE, you must set the appropriate environment variables in the configuration files used by BIRT iHub Visualization Platform and System Console.

### Modifying BIRT iHub Visualization Platform configuration files

This section assumes the BIRT iHub installation directory is `/opt/actuate/BIRTiHubVisualization`.

For BIRT iHub Visualization Platform, you must modify two files:

- `ihub.properties`, located in `/opt/actuate/BIRTiHubVisualization/modules/BIRTiHub`
- `acpmdconfig.xml`, located in `/opt/actuate/BIRTiHubVisualization/modules/BIRTiHub/iHub/etc`

In `ihub.properties`, modify the following lines so that the paths point to the JRE you want to use:

```
#AC_JRE_HOME=/opt/actuate/BIRTiHubVisualization/java
#AC_JAVA_HOME=/opt/actuate/BIRTiHubVisualization/java
```



In `acpmdconfig.xml`, modify the following lines so that the paths point to the JRE you want to use:

```
<EnvironmentVariable Name="JAVA_HOME"
  Value="/opt/actuate/BIRTiHubVisualization/java" />
<EnvironmentVariable Name="AC_JAVA_HOME"
  Value="/opt/actuate/BIRTiHubVisualization/java" />
<EnvironmentVariable Name="AC_JRE_HOME"
  Value="/opt/actuate/BIRTiHubVisualization/java" />
```

## Modifying System Console configuration files

This section assumes the System Console installation directory is `/opt/actuate/SystemConsole`.

For System Console, you must modify two files:

- `systemconsole.properties`, located in `/opt/actuate/SystemConsole/modules/SystemConsole`
- `wrapper.properties`, located in `/opt/actuate/SystemConsole/modules/SystemConsole/tomcat/conf/jk`

In `systemconsole.properties`, comment out the following entries and create new ones that point to the JRE you want to use:

```
#AC_JRE_HOME=/opt/actuate/SystemConsole/java
#AC_JAVA_HOME=/opt/actuate/SystemConsole/java
```

In `wrapper.properties`, modify the following line so that the path points to the JRE you want to use:

```
wrapper.java_home=/opt/actuate/SystemConsole/java
```

## Accessing JAR files for document generation

To generate some documents, iHub requires access to jar files in `<BIRT iHub installation directory>/modules/BIRTiHub/iHub/Jar`.

## Following best practices

Before deploying BIRT iHub in a production environment, Actuate recommends testing the installation in a separate staging area. The following sections provide some guidelines for setting up a test environment and production staging area.

### Using a test environment

Set up a test environment and then move to iHub on the production system when the testing is complete. You cannot mix Actuate products from different release levels. For example, you cannot use BIRT iServer Release 11 design tools with BIRT iHub Release 3 or 3.1.

Complete the following general tasks in this order to determine how to upgrade your site to BIRT iHub:

- Create a test environment for BIRT iHub. The test environment cannot be on the same machine that hosts an earlier Actuate installation.
- Install the software in the test environment.
- Ask application developers and a few users to perform some typical tasks in the test environment.
- Create a production staging area.
- Install the remaining BIRT iHub desktop products, if required, in production environments on the user workstations. Verify that the desktop products function properly.
- Schedule a low-impact time to switch to the production system.

## Setting up a production staging area

A production staging area is one that you can use for testing and also configure as the live production system. The production staging area can be a separate configuration on the live production machine or a separate machine. You can install all BIRT iHub products or the BIRT iHub server products and a subset of the desktop products.

If you plan to test BIRT iHub desktop products, identify which users to include in the final testing. Developers and users can then confirm that applications perform as expected in the BIRT iHub production staging environment.

Complete the following general tasks to test BIRT iHub:

- Install BIRT iHub software in a production staging area.
- Install BIRT iHub desktop software on the test user machines.
- Verify that the BIRT iHub production staging environment works correctly.
- Install the remaining BIRT iHub desktop products, if you installed a subset earlier.
- Verify that all the BIRT iHub desktop products work correctly.
- Begin setting up a production environment as described in the following section.

## Setting up a production environment

When testing is complete, confirm that your applications work as expected in the BIRT iHub environment. Set up the production environment and schedule a date and time to activate BIRT iHub.

When you switch to BIRT iHub, use the following procedure list as a general guideline:

- Install design and document files.
- Start BIRT iHub.
- Inform users that they can start using BIRT iHub design tool products.



# Installing BIRT iHub

This chapter contains the following topics:

- Prerequisites for installing BIRT iHub
- Installing individual BIRT iHub modules
- Reviewing the BIRT iHub installation
- Uninstalling BIRT iHub modules
- Stopping and starting a System Console or BIRT iHub instance
- Uninstalling BIRT iHub modules

---

## Prerequisites for installing BIRT iHub

BIRT iHub requires a 64-bit operating system.

For optimum performance, use a system that has a minimum of 8 GB RAM.

### Checking for ports used by BIRT iHub

BIRT iHub processes use network ports to communicate. Before installation, ensure that the ports used by BIRT iHub are available on the system. The ports used by BIRT iHub modules are listed in Table 2-1.

**Table 2-1** Required ports during and after BIRT iHub installation

| Port | Name                                       | Description                                                             |
|------|--------------------------------------------|-------------------------------------------------------------------------|
| 8000 | SOAPDispatchSOAPPort                       | Port for the Message distribution service endpoint                      |
| 8100 | PMDPort                                    | Message Distribution service port                                       |
| 8432 | PostgreSQL port                            | For iHub 3 metadata                                                     |
| 8433 | PostgreSQL port                            | For iHub 3.1 metadata                                                   |
| 8500 | SocketBaseForProcesses                     | Base port number for processes                                          |
| 8700 | AppContainerPort<br>CustomEventServicePort | Application container process listen port and Custom Event Service Port |
| 9432 | PostgreSQL port                            | For System Console                                                      |

The ports used by BIRT iHub modules after the installation are listed in Table 2-2.

**Table 2-2** Required ports after BIRT iHub installation

| Port  | Name                          | Description                                        |
|-------|-------------------------------|----------------------------------------------------|
| 8010  | ProvisioningSOAPPort          | Port for the Provisioning service endpoint         |
| 8011  | ProvisioningSOAPSSLPort       | SSL Port for the Provisioning service endpoint     |
| 11100 | UDPPort                       | UDP port [Heartbeat]                               |
| 11101 | ReportingEngineHeartbeat Port | Port number for receiving factory server heartbeat |
| 12100 | SOAPPort                      | Port for Integration server message endpoint       |
| 13500 | ServerSOAPPortBase            | Base port number for iHub internal SOAP endpoint   |

**Table 2-2** Required ports after BIRT iHub installation

| Port  | Name                            | Description                                                                                            |
|-------|---------------------------------|--------------------------------------------------------------------------------------------------------|
| 14000 | NWPPort                         | Port for Integration server query endpoint                                                             |
| 14200 | JavaEncycServerInternalSoapPort | Port number for iHub encyclopedia engine internal SOAP endpoint for servicing iHub components requests |
| 15200 | iHubcSOAPPort                   | Port number for iHubc SOAP endpoint                                                                    |
| 21000 | jsrvrihub                       | Base port number for BIRT online                                                                       |
| 21500 | jfctsvrihub                     | Base port number for BIRT factory processes                                                            |

You can change some of the port numbers that BIRT iHub uses after installing BIRT iHub. For more information, see “,” later in this chapter.

## Requirements to install and run BIRT iHub

The following sections describe the requirements for installing and running BIRT iHub.

### Configuring a Linux user account for BIRT iHub

Actuate recommends running the installation procedure from an account created exclusively for BIRT iHub administration. Having a dedicated user account isolates iHub-specific issues and events on a machine, making it easier to administer the environment. Use the same level of security that your site exercises for other system administrator and root accounts.

Use the dedicated user account for installing, running, and administering iHub.

Installing BIRT iHub under the root account is not supported. If installed under the root account, the default installation is unable to set up the required BIRT iHub metadata schemas and sample volume. The PostgreSQL RDBMS must run using an unprivileged user account to prevent compromising system security.

### Setting up libstdc++

The libstdc++ library is a prerequisite for running BIRT iHub on Linux systems. This library is present by default on most systems. If it is not present, the administrator must install it before installing BIRT iHub, using a command similar to the following one:

```
yum install libstdc++.i686
```

On Red Hat Enterprise Linux 7 and CentOS 7 operating systems, BIRT iHub requires both the 32-bit and 64-bit versions of the library.

Installation of BIRT iHub succeeds if this library is not present, but the server fails to start.

### Using run level 3

The BIRT iHub installation process requires running Linux at run level 3. Run level 3 is the default on most servers running the Linux operating system. This level supports networking and multi-user mode with a command-line interface.

### 32-bit library support

Although BIRT iHub is a 64-bit application, 32-bit library support is required for installation. BIRT iHub requires either `glibc.i686` or `glibc.i386`. If the BIRT iHub installation is unable to locate the required package, an error similar to the following one appears:

```
/opt/actuate/iHub3/BIRTiHubVisualization/acinstall/Ant/apache-ant-1.8.2/bin/ant:  
/opt/actuate/iHub3/BIRTiHubVisualization/acinstall/jre/bin/java  
: /lib/ld-linux.so.2: bad ELF interpreter: No such file or  
directory
```

To install 32-bit `glibc`, use a command similar to the following one:

```
yum install glibc.i686
```

---

## Installing individual BIRT iHub modules

This section describes how to install BIRT iHub with Visualization Platform and System Console individually.

Perform the procedures in this section only if you do not have BIRT iHub already installed on your system. If you purchased BIRT iHub Release 3 (including fix releases) or Release 3.1 and installed the files that you downloaded, you can upgrade to BIRT iHub Release 3.1.1 by following the instructions in Chapter 4, “Upgrading to Visualization Platform 3.1.1,” and Chapter 5, “Upgrading to System Console 3.1.1.”

System Console creates a default cluster automatically. If you install System Console and BIRT iHub individually using the procedures described in this section, you must add a node and a volume to the default cluster after installing System Console. For information on clustering, see Chapter 5, “Managing Clusters,” in *BIRT iHub System Administration Guide*.

When installing a BIRT iHub module individually, the administrator performs the following tasks:

- Downloads a BIRT module archive file, such as `BIRTiHubVisualization.tar.gz` or `SystemConsole.tar.gz`, from the software distribution site



- Creates a new folder and unbundles the BIRT module archive file into the folder
- Reviews the software license agreement
- Updates the installation properties file
- Runs the install script, `install.sh`

## Installing the System Console module

For information about accessing System Console after installation, see Chapter 3, “Setting up BIRT iHub.”

### How to run the System Console installation script

- 1 Download the installation package, `SystemConsole.tar.gz`, from the software distribution site.
- 2 Create a new folder into which to extract the files that `SystemConsole.tar.gz` contains, such as `/opt/actuate`, if you have not already done so.
- 3 Unbundle the `tar.gz` file into `/opt/actuate`. Unbundling the tar file creates the installation directory, `/opt/actuate/SystemConsole`.
- 4 Navigate to `/opt/actuate/SystemConsole/License`
- 5 Open and read the file, `license.txt`. You can specify whether you agree to the license terms when you edit the `acinstall.properties` file, as described in step 7, or when you run the install script, as described in step 8.
- 6 Navigate to `/opt/actuate/SystemConsole`.
- 7 Using a text editor, open the `acinstall.properties` file, as shown in Listing 2-1, and perform the following tasks:
  - 1 For `ac.login`, specify the machine and account name for the machine onto which you are installing System Console. For `ac.password`, specify the account name password.
  - 2 Modify the `ac.homedir` property to specify the full installation directory path if you do not run the install script, `install.sh`, from the installation directory.
  - 3 Leave `ac.downloadonly` set to `false`.
  - 4 For `ac.acceptlicense`, accept the default value of prompt for the install script to prompt you for whether you accept the software license terms when you run the script. Alternatively, specify `y` for yes, to accept the software license terms. You must agree to the license terms to install System Console.
  - 5 Save and close the file.

## Listing 2-1 acinstall.properties for installing System Console

---

```
#Tue, 11 Jun 2015 16:19:16 -0700
ac.login=//URUP/actuate
ac.password=password
ac.package=a

# Please use forward slashes for the home fully qualified path
# on Windows OS, for example ac.homedir=D:/iHub/distribution
ac.homedir=.
ac.downloadonly=false

# Please use forward slashes for the source network path on
# Windows OS, for example 'source'=//fs/installDir/iHub
# /distribution
#ac.source=.

# The license agreement (license.txt) file is located in the
# ./License directory
# The default value of the ac.acceptlicense parameter is set to
# 'prompt', which requires the user to read the license
# agreement before accepting it
# Before starting a network/silent install, read the
# license.txt file and change the value of the ac.acceptlicense
# parameter to 'y' to confirm that you agree to the terms of
# the license agreement
# ac.acceptlicense=prompt
ac.acceptlicense=y

#Advanced Settings
#ac.iHub_cluster_schema_name=
#ac.iHub_postgres_port=
```

### 8 Execute the install.sh script using the following command:

```
sh ./install.sh
```

When you run the installation script, you see the message “Unable to locate tools.jar.” You can safely ignore this message.

The script displays messages similar to those shown in Listing 2-2.

## Listing 2-2 Installing System Console

---

```
Install will start now...
[echo] Downloading from given file system location
[echo] Verifying Checksum...
[echo] Completed verification
[echo] Extracting package System Console
[echo] Installing System Console. This may take a few
minutes...
```

```
[echo] To access System Console, use URL:
      http://localhost:8500/sysconsole
[echo] Setup Completed

INSTALL SUCCEEDED
Total time: 59 seconds
installation complete
```

## Installing the Visualization Platform module

For information about accessing Visualization Platform after installation, see Chapter 3, “Setting up BIRT iHub.”

### How to install the Visualization Platform module

- 1 Download the installation package, BIRTiHubVisualization.tar.gz, from the software distribution site.
- 2 Create a new folder into which to extract the files that BIRTiHubVisualization.tar.gz contains, such as /opt/actuate, if you have not already done so.
- 3 Unbundle the tar.gz file into opt/actuate. Unbundling the tar.gz file creates the installation directory, /opt/actuate/BIRTiHubVisualization.
- 4 Navigate to /opt/actuate/BIRTiHubVisualization/License.
- 5 Open and read the file, license.txt. You must agree to the license terms to install BIRT iHub Visualization Platform.
- 6 Navigate to /opt/actuate/BIRTiHubVisualization.
- 7 Using a text editor, open the acinstall.properties file. Using the example shown in Listing 2-3, perform the following tasks:
  - 1 Modify the ac.login and ac.password properties to contain the login and password for the machine onto which you are installing Visualization Platform.
  - 2 Modify the ac.homedir property to specify the full installation directory path if you do not run the install script, install.sh, from the installation directory.
  - 3 Leave ac.downloadonly set to false.
  - 4 Set ac.upgrade.ihub and ac.upgrade.start.ihub to n.
  - 5 For ac.acceptlicense, accept the default value of prompt for the install script to prompt you for whether you accept the software license terms when you run the script. Alternatively, specify y for yes, to accept the software license terms.
  - 6 Save and close the file.

### Listing 2-3 acinstall.properties for installing BIRT iHub Visualization Platform

---

```
#Tue, 11 Jun 2015 16:19:16 -0700
ac.login=//URUP/actuate
ac.password=password
ac.package=b

# Please use forward slashes for the home fully qualified path
# on Windows OS, for example ac.homedir=D:/iHub/distribution

# For a new BIRT iHub installation, specify the pathname of the
# folder where you want to install BIRT iHub as the value of
# the ac.homedir property. The default is the current
# directory.
# For upgrading from ihub3/Linux.0 to ihub3/Linux.1F1, change
# the value of ac.homedir to the existing iHub location, for
# example, ac.homedir=/opt/actuate/BIRTiHubVisualization
ac.homedir=.
ac.downloadonly=false

# If you are performing a new BIRT iHub install, specify n as
# the value for upgrade.ihub. If you are upgrading
# ihub3/Linux.0 to ihub3/Linux.1 Fix 1, specify y as the value
# for upgrade.ihub.
# To start BIRT iHub automatically after upgrading, specify y
# as the value for upgrade.start.ihub. If you do not want to
# start BIRT iHub after upgrading, specify n as the value for
# upgrade.start.ihub.
# ac.upgrade.ihub=prompt
# ac.upgrade.start.ihub=prompt
ac.upgrade.ihub=n
ac.upgrade.start.ihub=n

# Please use forward slashes for the source network path on
# Windows OS, for example 'source'=//fs/installDir/iHub
# /distribution
# ac.source=.

# The license agreement (license.txt) file is located in the
# ./License directory
# The default value of the ac.acceptlicense parameter is set to
# 'prompt', which requires the user to read the license
# agreement before accepting it
# Before starting a network/silent install, read the
# license.txt file and change the value of the ac.acceptlicense
# parameter to 'y' to confirm that you agree to the terms of
# the license agreement
# ac.acceptlicense=prompt
```

```
ac.acceptlicense=y
#Advanced Settings
#ac.ihub_cluster_schema_name=
#ac.ihub_postgres_port=
```

- 8** Execute the `install.sh` script using the following command:

```
sh ./install.sh
```

When you run the BIRT iHub installation script, you see the message “Unable to locate tools.jar.” You can safely ignore this message.

The script displays messages similar to those shown in Listing 2-4.

**Listing 2-4** Installing BIRT iHub Visualization Platform

---

```
Install will start now...
[echo] Downloading from given file system location
[echo] Verifying Checksum...
[echo] Completed verification
[echo] Extracting package Actuate BIRT iHub
[echo] Installing Actuate BIRT iHub. This may take a few
      minutes...
[echo] Using default PostgreSQL database port number 8433
[echo] Using default schema name
[echo] To access Information Console, use URL:
      http://localhost:8700/iportal
[echo] Setup Completed

INSTALL SUCCEEDED
Total time: 2 minutes 46 seconds
installation complete
```

---

## Reviewing the BIRT iHub installation

The BIRT iHub installation programs create log files containing information about the tasks completed during the installation process. Table 2-3 lists the installation log files for each BIRT iHub module.

**Table 2-3** Installation log files for BIRT iHub modules

---

| Module         | Log files                                                                    |
|----------------|------------------------------------------------------------------------------|
| All modules    | In the installation directory:<br>installer.log                              |
| System Console | In <installation directory>/modules/SystemConsole:<br>setupSystemConsole.log |

**Table 2-3** Installation log files for BIRT iHub modules

| Module                 | Log files                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------|
| Visualization Platform | In <installation directory>/modules/BIRTiHub:<br>setup.log<br>setupiHub.log<br>uploadsamplecontent.log |

---

## Stopping and starting a System Console or BIRT iHub instance

System Console and BIRT iHub installations include shell scripts that stop and start System Console and BIRT iHub processes and their default databases.

The following list describes the stop and start shell scripts for System Console and BIRT iHub.

- System Console stop and start scripts:
  - <Installation folder>/modules/SystemConsole/stopSystemConsole.sh  
Stops the Tomcat application container and the System Console database
  - <Installation folder>/modules/SystemConsole/startupSystemConsole.sh  
Starts the Tomcat application container and the System Console database
  - <Installation folder>/modules/SystemConsole/setup/stoppostgresql.sh  
Stops the System Console database
  - <Installation folder>/modules/SystemConsole/setup/startpostgresql.sh  
Starts the System Console database
- BIRT iHub stop and start scripts:
  - <Installation folder>/modules/BIRTiHub/stopiHub.sh  
Stops iHub processes and the OOTB PostgreSQL metadata database
  - <Installation folder>/modules/BIRTiHub/startiHub.sh  
Starts iHub processes and the OOTB PostgreSQL metadata database
  - <Installation folder>/modules/BIRTiHub/stopPostgreSQL.sh  
Stops the OOTB PostgreSQL metadata database
  - <Installation folder>/modules/BIRTiHub/startPostgreSQL.sh  
Starts the OOTB PostgreSQL metadata database

---

## Uninstalling BIRT iHub modules

Uninstalling BIRT iHub deletes the iHub metadata including dashboards, reports, and jobs in a volume. To transfer a volume to a different iHub installation or to switch to a different metadata database, see *BIRT iHub System Administration Guide*.

Uninstall a BIRT iHub module by stopping the module and deleting the installation directory. Deleting the directory deletes the iHub metadata.

### How to uninstall BIRT iHub

- 1 Navigate to <installation directory>/modules/BIRTiHub.
- 2 Execute the stopiHub.sh script using the following command:  

```
sh ./stopiHub.sh
```
- 3 Execute the stopPostgreSQL.sh script using the following command:  

```
sh ./stopPostgreSQL.sh
```
- 4 Delete the installation directory, for example, opt/actuate/BIRTiHubVisualization.

### How to uninstall System Console

- 1 Navigate to <installation directory>/modules/SystemConsole.
- 2 Execute the stopSystemConsole.sh script using the following command:  

```
sh ./stopSystemConsole.sh
```
- 3 If you do not see a message in the stopSystemConsole.sh script output indicating that the script stopped PostgreSQL, navigate to <installation directory>/modules/SystemConsole/setup and execute the stoppostgresql.sh script using the following command:  

```
sh ./stoppostgresql.sh
```
- 4 Delete the installation directory, for example, opt/actuate/SystemConsole.





# Setting up BIRT iHub

This chapter contains information on Setting up BIRT iHub and accessing modules.

---

## Setting up BIRT iHub and accessing modules

After installing System Console and BIRT iHub Visualization Platform, use System Console to create a cluster containing a single node. The cluster enables the system administrator to license the modules and monitor the iHub usage. For information about configuring BIRT iHub applications and databases, see *BIRT iHub System Administration Guide*.

### Accessing System Console

To open System Console, open a browser manually and enter the following URL:

```
http://localhost:8500/sysconsole
```

To access System Console from another system, open a browser manually and enter a URL similar to the following one, where servername is the name of the machine where you installed System Console:

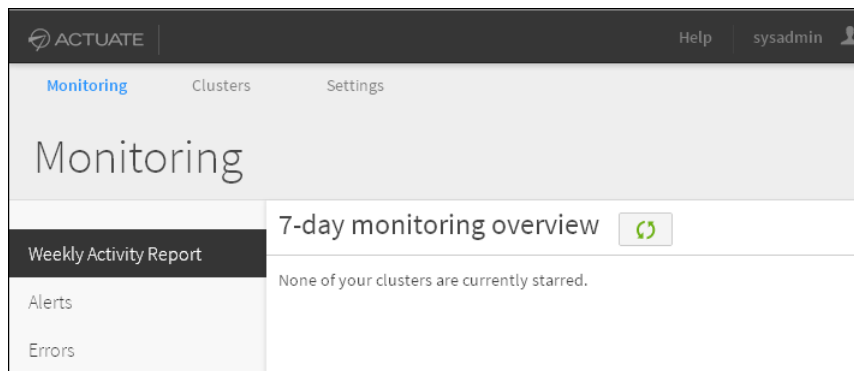
```
http://servername:8500/sysconsole
```

Log in to System Console using the following default system administrator credentials:

- Username: sysadmin
- Password: system11

You can change the default system administrator login name and password in System Console—Settings—System Admin Users. System Console initially displays the 7-day monitoring overview, as shown in Figure 3-1.

The login password for the postgres user in the default PostgreSQL RDBMS is postgres.



**Figure 3-1** Viewing System Console

A system administrator uses System Console to configure BIRT iHub System, including specifying the settings for the following items:

- Create and configure a cluster
- Connect to a database
- Add a volume
- Tune services and processes
- Specify ports
- Manage resources
- Viewing Logging and Monitoring System (LMS)
- Configure alerts
- Review and update license options

For more information about using System Console, see *BIRT iHub System Administration Guide*. For more information about administering the PostgreSQL RDBMS, see the vendor documentation at:

<http://www.postgresql.org/docs>

## Accessing Information Console

To access Information Console, open a browser and enter the following URL:

`http://localhost:8700/iportal`

To access Information Console from another system, open a browser manually and enter a URL similar to the following one, where `servername` is the name of the machine where you installed Visualization Platform:

`http://servername:8700/iportal`

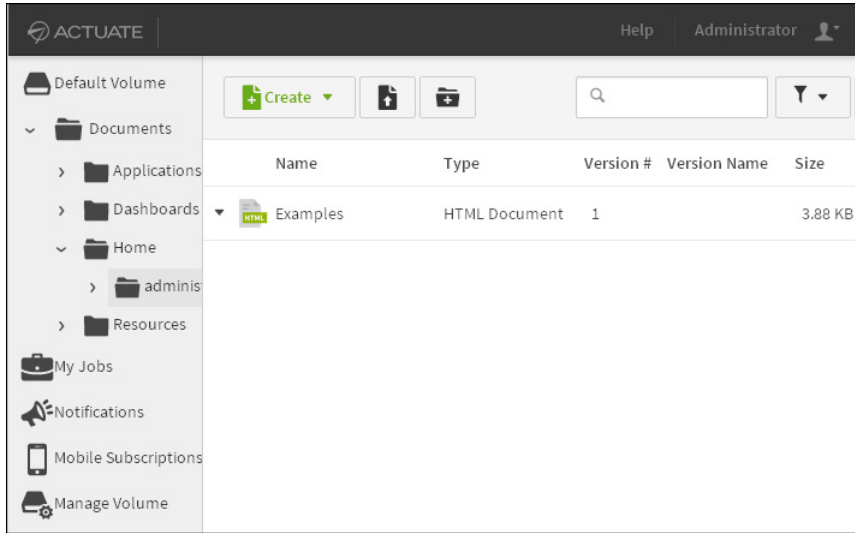
Log in to Information Console using the following default volume administrator credentials:

- Username: Administrator
- Leave the password blank

Then, choose Log In.

To log in to Information Console using a volume other than the default volume, type `<volume name>\username`. For example, type `sales_volume\Administrator` to log in as Administrator to a volume named `sales_volume`.

Information Console appears, as shown in Figure 3-2.



**Figure 3-2** Viewing Information Console

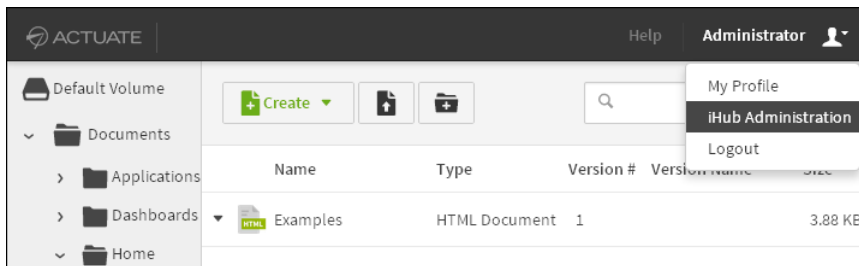
## About Information Console functionality

Information Console provides end-user access to dashboards, files, folders, and gadgets. This access includes sharing items that the user owns, and submitting jobs. For more information about this functionality, see *Using Information Console*.

The system administrator uses iHub Administration to add users and user groups, and configure access to BIRT iHub shared application services and volume items such as dashboards, files, folders, and gadgets.

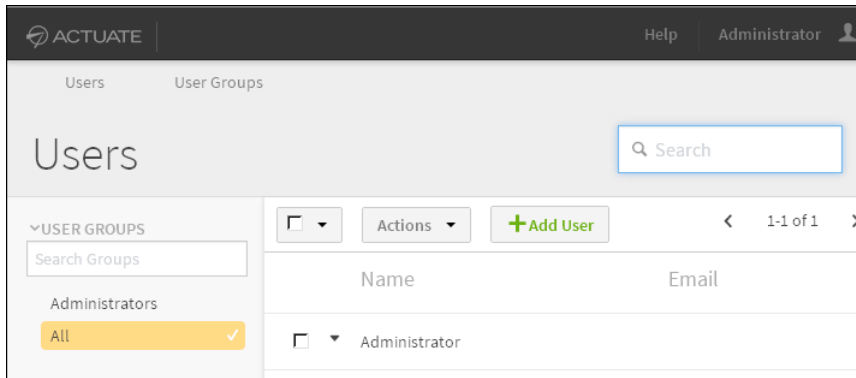
## Accessing user administration

To administer the Information Console users and user groups, choose Administrator—iHub Administration, as shown in Figure 3-3. This choice appears if the user has the requisite privileges.



**Figure 3-3** Accessing iHub Administration

iHub Administration appears, as shown in Figure 3-4.



**Figure 3-4** Viewing iHub Administration

### How to disable user administration

To disable user administration functionality completely in this web application for security reasons, perform the following tasks:

- 1 Delete the following folder from the installation environment:  
iHub3/modules/BIRTiHub/iHub/web/iportal/admin
- 2 Comment out or delete the context path setting in the web.xml file in the following location, shown in Listing 3-1:

iHub3/modules/BIRTiHub/iHub/web/iportal/WEB-INF/web.xml

**Listing 3-1** Administration context path in Information Console web.xml

---

```
<context-param>
  <param-name>MC_CONTEXT</param-name>
  <param-value>/admin</param-value>
</context-param>
```

For more information about BIRT iHub Information Console user administration tools, see *Managing Volumes and Users*.

### Managing a volume

A user who has administrative privileges has access to the Manage Volume tools in Information Console. For more information about the volume management tools, see *Managing Volumes and Users*.



# Part Two

---

**Upgrading to BIRT iHub 3.1.1**





# 4

## Upgrading to Visualization Platform 3.1.1

This chapter contains the following topics:

- Understanding upgrading to iHub Visualization Platform 3.1.1
- Preparing for the upgrade
- Disabling your existing Visualization Platform
- Pre-upgrade checklist
- Understanding the upgrade program
- Upgrading to Visualization Platform 3.1.1

---

## Understanding upgrading to iHub Visualization Platform 3.1.1

This document explains how to upgrade to Visualization Platform Release 3.1.1 from Visualization Platform 3 (including fix releases) or 3.1.

For assistance with migration to BIRT iHub 3.1.1 from Actuate BIRT iHub 2 or Actuate BIRT iServer, please contact Actuate Support.

The topics in this chapter explain the operations you perform in sequence to upgrade your existing Visualization Platform to Visualization Platform 3.1.1.

This upgrade procedure works for BIRT iHub installations that have multiple volumes, and that use any of the databases BIRT iHub supports:

- The default PostgreSQL database that installs with BIRT iHub Visualization Platform
- A standalone, pre-existing PostgreSQL database
- An Oracle database

You upgrade a BIRT iHub 3 (including fix releases) or BIRT iHub 3.1 installation to BIRT iHub 3.1.1 by performing an in-place upgrade. The upgrade program preserves any customizations you have made to your BIRT iHub installation. It does not overwrite the `acserverconfig.xml`, `acpmdconfig.xml`, or `web.xml` files.

To upgrade an iHub cluster, you must shut down the cluster and upgrade each node individually.

You cannot upgrade in place if you are running BIRT iHub F-Type or BIRT iHub Trial Edition. You must obtain a license from Actuate if you want to install BIRT iHub 3.1.1.

---

## Preparing for the upgrade

This section contains information you need to know before beginning the upgrade process.

### About the privileges needed for the upgrade process

To execute the upgrade process, you must log in to your computer using the same user name and password that you used to install Visualization Platform.

## Identifying folders in your existing Visualization Platform installation

Before beginning the upgrade process, identify the following folders in your existing Visualization Platform installation.

- The installation root folder  
The folder where your existing Visualization Platform is installed. It contains a folder named `modules`. In a typical installation, the default path of the root folder is either:

```
/opt/actuate/BIRTiHubVisualization
```

or:

```
/opt/actuate3/BIRTiHubVisualization
```

- The Visualization Platform home folder  
The home folder in your existing installation is named `iHub`. This folder is in the `BIRTiHub` folder, which the `modules` folder contains. In a typical installation, the default path of the home folder is either:

```
/opt/actuate/BIRTiHubVisualization/modules/BIRTiHub/iHub
```

or:

```
/opt/actuate3/BIRTiHubVisualization/modules/BIRTiHub/iHub
```

---

## Disabling your existing Visualization Platform

You must disable your existing Visualization Platform before you upgrade to Visualization Platform 3.1.1. After you disable your existing Visualization Platform, make sure that none of the following processes are running:

- `ihubd`
- `ihubc`
- `ihub`
- `ihubservletcontainer`
- `intsrvrihub.exe`
- `jfctsrvrihub.exe`
- `jsrvrihub`
- `LMServer`
- `LSTailer`

To disable your existing Visualization Platform, stop the `iHub` and `Postgres` (if necessary) processes by performing the steps in the following section.

### How to disable Visualization Platform

1 Log on to the machine where your existing Visualization Platform is installed using an account having root privileges.

2 Navigate to the folder that contains the Visualization Platform home folder, for example:

```
cd /opt/actuate3/BIRTiHubVisualization/modules/BIRTiHub
```

3 Execute the stopiHub.sh script, for example:

```
sh ./stopiHub.sh
```

4 If necessary, execute the stopPostgreSQL.sh script, for example:

```
sh ./stopPostgreSQL.sh
```

---

## Pre-upgrade checklist

Before you upgrade to Visualization Platform 3.1.1, make sure that:

- You have at least 5 GB of free disk space.
- You make a backup copy of your existing Visualization Platform installation.
- The processes listed in “Disabling your existing Visualization Platform” are not running.
- The following ports are free: 8000, 8100, 8432, 8433, 5000, 8700.
- Files and folders in your existing Visualization Platform installation are not in use.
- If you installed BIRT iHub Release 3.0 or 3.1 with Visualization Platform and any other BIRT iHub module on the same machine at the same time using the command-line installer, as documented in *Installing Multiple Modules on Linux Platforms*, ensure that all files and folders associated with all existing BIRT iHub modules are not in use.

---

## Understanding the upgrade program

When you run the upgrade program, it performs the following tasks. BIRTiHubVisualization is the name of your existing installation folder.

- Identifies AC\_CONFIG\_HOME and AC\_DATA\_HOME using the acpmdconfig.xml file in the current installation.
- Renames the following folders in order to preserve any customizations you may have made:

- `${ihub_home}/oda/eclipse/plugins/` to `${ihub_home}/oda/eclipse/plugins_old`
- `${ihub_home}/Jar/BIRT/` to `${ihub_home}/Jar/BIRT_old`
- `${ihub_home}/web/iportal/WEB-INF/lib/` to `${ihub_home}/web/iportal/WEB-INF/lib_old`
- Deletes `tools/lib/xmltask-ibm-jdk.jar` and `Jar/chatserver.jar`.
- Renames your existing BIRTiHubVisualization folder to `BIRTiHubVisualization_${uuid}`, where `uuid` is a universally unique identifier such as `de305d54-75b4-431b-adb2-eb6b9e546014`.
- Copies the folder where you unzipped `BIRTiHubVisualization.tar.gz` to `BIRTiHubVisualization/`.
- Runs the upgrade script in the `BIRTiHubVisualization` folder.
- Renames the following `web.xml` files to `web.xml.new`. The settings in your old `web.xml` files are preserved.
  - `BIRTiHubVisualization/modules/BIRTiHub/iHub/web/iportal/WEB-INF/web.xml`
  - `BIRTiHubVisualization/modules/BIRTiHub/iHub/web/mgmtconsole/WEB-INF/web.xml`
- Overwrites `BIRTiHubVisualization_${uuid}/` with `BIRTiHubVisualization/`. The `shared/` and `data/` folders and `acpmdconfig.xml` file are not overwritten.
- Overwrites `${AC_CONFIG_HOME}` with `BIRTiHubVisualization/shared/config/acserverconfig.xml`. Your old `acserverconfig.xml` file is preserved, but it is updated with the new version number.
- Deletes `BIRTiHubVisualization/`.
- Renames `BIRTiHubVisualization_${uuid}/` as `BIRTiHubVisualization/`.
- Upgrades `acpmdconfig.xml` to include new functionality, but preserves your settings.
- Displays a message indicating that the upgrade is complete.
- Prompts you to start `iHub` unless you specified automatic startup.

---

## Upgrading to Visualization Platform 3.1.1

This section contains information you need to know in order to upgrade to Visualization Platform 3.1.1.

## Specifying the upgrade user account

To ensure that file permissions are set correctly, you must upgrade to Visualization Platform 3.1.1 using the same user account that was used to install your existing Visualization Platform.

## Setting the installation root folder for the upgrade

You can unzip BIRTiHubVisualization.tar.gz into any folder other than your existing Visualization Platform installation root folder. You must then specify the installation root folder in the acinstall.properties file.

Your existing Visualization Platform configuration contains absolute paths. Visualization Platform 3.1.1 must use the same paths. To ensure that these paths are the same, you must upgrade to Visualization Platform 3.1.1 using exactly the same installation root folder that your existing Visualization Platform installation used. For example, if your existing Visualization Platform was installed in /opt/actuate/BIRTiHubVisualization, you must upgrade to Visualization Platform 3.1.1 using the installation root folder /opt/actuate/BIRTiHubVisualization.

## Completing the upgrade

Upgrade to Visualization Platform 3.1.1 using the instructions in Chapter 2, “Installing BIRT iHub.” In acinstall.properties, set ac.upgrade.iHub to y. If you want to start BIRT iHub automatically after upgrading, also set ac.upgrade.start.iHub to y. Do not unzip BIRTiHubVisualization.tar.gz into your existing Visualization Platform installation root folder, as it will overwrite the files in this folder. Do not open any files or folders in either the existing BIRT iHub installation or the new installation until you have finished the upgrade.

## Post-upgrade tasks

After completing the upgrade, you must perform the following tasks:

- Move any customized JAR files in the following folders to the corresponding folders in the new installation. Then, delete the \_old folders.
  - \${iHub\_home}/oda/eclipse/plugins\_old
  - \${iHub\_home}/Jar/BIRT\_old
  - \${iHub\_home}/web/iportal/WEB-INF/lib\_old
- Merge the new content in the following files into the corresponding web.xml files:
  - BIRTiHubVisualization/modules/BIRTiHub/iHub/web/iportal/WEB-INF/web.xml.new

- BIRTiHubVisualization/modules/BIRTiHub/iHub/web/mgmtconsole/WEB-INF/web.xml.new
- Delete the folder into which you unzipped BIRTiHubVisualization.tar.gz.

## **Verifying the Visualization Platform 3.1.1 upgrade**

When the upgrade program finishes, start Visualization Platform 3.1.1 if it did not start automatically.

To verify that Visualization Platform 3.1.1 was upgraded correctly, log in using the following default credentials:

- Username: Administrator
- Password: Leave Password blank

Visualization Platform 3.1.1 includes a sample volume named Default Volume. After logging in, verify that you can navigate in the volume.





# Upgrading to System Console 3.1.1

This chapter contains the following topics:

- Understanding upgrading to System Console 3.1.1
- Preparing for the upgrade
- Disabling your existing System Console
- Renaming your existing installation root folder
- Installing System Console 3.1.1
- Copying configuration and database files
- Starting and logging in to System Console 3.1.1
- Removing your previous System Console
- Deleting the System Console 3.1.1 database files backup folder

---

## Understanding upgrading to System Console 3.1.1

This document explains how to upgrade System Console from Release 3 (including fix releases) or Release 3.1 to Release 3.1.1. Upgrading is the process of installing and configuring Release 3.1.1, and moving the data and files from your previous System Console.

The topics in this chapter explain the operations you perform in sequence to upgrade to System Console 3.1.1.

---

## Preparing for the upgrade

This section contains information you need to know before beginning the upgrade process.

### About the privileges needed for the upgrade process

To execute the upgrade process, you must log in as a user with root privileges.

### Identifying folders in your existing System Console installation

Before beginning the upgrade process, identify the following folders in your existing System Console installation:

- The installation root folder  
The folder where your existing System Console was installed. It contains a folder named `modules`. In a typical installation, the default path of the root folder is either:  
`/opt/actuate/SystemConsole`  
or:  
`/opt/actuate3/SystemConsole`
- The System Console home folder  
The home folder in your existing installation is named `SystemConsole`. This folder is in the `modules` folder, which the installation root folder contains. In a typical installation, the default path of the home folder is either:  
`/opt/actuate/SystemConsole/modules/SystemConsole`  
or:  
`/opt/actuate3/SystemConsole/modules/SystemConsole`

---

## Disabling your existing System Console

If you are installing System Console 3.1.1 onto the same machine where your existing System Console is installed, you must disable your existing System Console before installing System Console 3.1.1. Only one System Console version can run at a time on a single machine.

If you are installing System Console 3.1.1 onto a different machine from where your existing System Console is installed, you must disable your existing System Console before copying configuration and database files from your existing System Console to System Console 3.1.1.

By default, System Console does not start automatically. Your system may have been configured to start System Console and its associated PostgreSQL server automatically. In this case, you must disable or remove the auto-start configuration.

### How to disable System Console

- 1 Navigate to the System Console installation root folder on the machine where System Console is installed. For example:  

```
cd /opt/actuate3/SystemConsole
```
- 2 Execute `stopSystemConsole.sh`.

---

## Renaming your existing installation root folder

If you are installing System Console 3.1.1 onto the same machine where your existing System Console is installed, you must rename the System Console installation root folder before installing System Console 3.1.1. Your existing System Console must be disabled before performing this operation, as described in the preceding section.

If you are installing System Console 3.1.1 onto a different machine from where your existing System Console is installed, you do not need to rename the System Console root folder. Skip to “Installing System Console 3.1.1.”

### How to rename your installation root folder

- 1 Navigate to the folder that contains the System Console installation root folder, for example:  

```
cd /opt/actuate
```

or:

```
cd /opt/actuate3
```

- 2 Use the `mv` command to add “\_OLD” to the end of the installation root folder name:  

```
mv SystemConsole SystemConsole_OLD
```

---

## Installing System Console 3.1.1

This section contains information you need to know before installing System Console 3.1.1, the location of the installation instructions, and the credentials with which to log in to System Console 3.1.1 after it is installed.

### Specifying the installation user account

To ensure that file permissions are set correctly, you must install System Console 3.1.1 using the same user account that was used to install your existing System Console.

### Setting the installation root folder

Your existing System Console configuration contains absolute paths. System Console 3.1.1 must use the same paths. To ensure that these paths are the same, you must install System Console 3.1.1 using exactly the same installation root folder that your existing System Console installation used. For example, if System Console was installed in `/opt/actuate/SystemConsole`, you must install System Console 3.1.1 in `/opt/actuate/SystemConsole`. If System Console was installed in `/opt/actuate3/SystemConsole`, you must install System Console 3.1.1 in `/opt/actuate3/SystemConsole`.

### Completing the installation

Install System Console 3.1.1 using the instructions in Chapter 2, “Installing BIRT iHub.”

### Verifying the System Console 3.1.1 installation

When the installation program finishes, start System Console 3.1.1 if it did not start automatically.

To verify that System Console 3.1.1 installed correctly, log in to System Console using the following default system administrator credentials:

- Username: `sysadmin`
- Password: `system11`

Do not change any System Console configuration settings or define a cluster because you need to copy configuration and database files first, as described in the next section, “Copying configuration and database files.”

Log out of System Console.

---

## Copying configuration and database files

To preserve data from your previous System Console, copy configuration and database files from your previous System Console to System Console 3.1.1. This operation consists of the following tasks:

- Shutting down System Console 3.1.1 and your previous System Console
- Backing up and deleting PostgreSQL database files from the System Console 3.1.1 installation
- Copying the files

### Shutting down System Console 3.1.1

Before you can copy files from your previous System Console to System Console 3.1.1, you must shut down System Console 3.1.1. The script that performs this operation stops the System Console process and the System Console PostgreSQL process.

#### How to shut down System Console 3.1.1

- 1 Navigate to the System Console 3.1.1 home folder. For example:  

```
cd /opt/actuate3/SystemConsole/modules/SystemConsole
```
- 2 Execute `stopSystemConsole.sh`.

### Shutting down and disabling your previous System Console

If you have not already done so, you must disable your previous System Console before copying files into System Console 3.1.1. See “Disabling your existing System Console,” earlier in this chapter.

### Deleting PostgreSQL database files

Before you can copy files from your previous System Console to System Console 3.1.1, you must delete PostgreSQL database files that the System Console 3.1.1 installation created. These files are contained in the `database/data` folder in the home folder of System Console 3.1.1.

### How to delete PostgreSQL database files

- 1 Navigate to the database folder within the System Console 3.1.1 home folder, for example:

```
cd /opt/actuate3/SystemConsole/modules/SystemConsole/database
```

- 2 Create a backup copy of the data folder and move that folder out of the database folder.
- 3 Use the rm command to delete the data folder:

```
rm -rf data
```

## Copying the files

To complete the System Console upgrade, you copy the configuration and database files from your previous System Console to System Console 3.1.1.

If you installed System Console 3.1.1 onto the same machine where your previous System Console is installed, perform the tasks in “How to copy files.”

If you installed System Console 3.1.1 onto a different machine than where your previous System Console is installed, perform the tasks in “How to copy files,” using the scp or ftp commands instead of the cp command. Additionally, change:

```
System Console_OLD
```

to:

```
System Console
```

in the System Console pathnames, since it is not necessary to rename the previous System Console installation root folder when installing System Console 3.1.1 onto a different machine than where your previous System Console is installed.

### How to copy files

- 1 Navigate to the database folder within the System Console 3.1.1 home folder. For example:

```
cd /opt/actuate3/SystemConsole/modules/SystemConsole/database
```

- 2 Use the cp command to copy database files from your previous System Console to System Console 3.1.1. Use the -p option to preserve ownership and permissions. For example:

```
cp -rp /opt/actuate3/SystemConsole_OLD/modules/SystemConsole/database/data .
```

- 3 Navigate to the /tomcat/webapps/sysconsole/WEB-INF folder within the System Console 3.1.1 home folder. For example:

```
cd /opt/actuate3/SystemConsole/modules/SystemConsole/tomcat/webapps/sysconsole/WEB-INF
```

- 4 As a best practice, make backup copies of the following files:

- .configured
  - umcconfig.xml
  - web.xml
- 5 Use the `cp` command to copy configuration files from your previous System Console to System Console 3.1.1. Use the `-p` option to preserve ownership and permissions. For example:

```
cp -p /opt/actuate3/SystemConsole_OLD/modules/SystemConsole
/tomcat/webapps/sysconsole/WEB-INF/.configured .
cp -p /opt/actuate3/SystemConsole_OLD/modules/SystemConsole
/tomcat/webapps/sysconsole/WEB-INF/umcconfig.xml .
cp -p /opt/actuate3/SystemConsole_OLD/modules/SystemConsole
/tomcat/webapps/sysconsole/WEB-INF/web.xml .
```

---

## Starting and logging in to System Console 3.1.1

The upgrade process for System Console is complete. You can now start and log in to System Console 3.1.1.

### How to start System Console 3.1.1 processes

- 1 Navigate to the System Console 3.1.1 home folder. For example:  
`cd /opt/actuate3/SystemConsole/modules/SystemConsole`
- 2 Execute `startupSystemConsole.sh` to start the System Console 3.1.1 processes.

Log in to System Console 3.1.1 and verify that it is behaving as expected.

To log in to System Console, open a new browser window and enter a URL similar to the following one, where `servername` is the name of the machine where you installed System Console 3.1.1:

```
http://servername:8500/sysconsole
```

---

## Removing your previous System Console

When you are confident that System Console 3.1.1 is operating correctly, you can remove your previous System Console. To perform this operation, simply delete the old System Console installation root folder.

### How to remove your previous System Console

- 1 Log in as a user with root privileges.
- 2 Use the `rm` command to delete the old System Console installation root folder.

If you installed System Console 3.1.1 on the same machine as your previous System Console, you renamed the old System Console installation root folder as described in “Renaming your existing installation root folder,” so use that folder name in the command, for example,

```
rm -rf /opt/actuate3/SystemConsole_OLD
```

If you installed System Console 3.1.1 on a different machine than where your previous System Console is installed, you did not need to rename the old System Console installation root folder before installing System Console 3.1.1. Use the original pathname of the old System Console installation root folder in the rm command, for example:

```
rm -rf /opt/actuate3/SystemConsole
```

---

## Deleting the System Console 3.1.1 database files backup folder

Delete the backup copy of the data folder, containing the PostgreSQL database files that the System Console 3.1.1 installation created, as described in “Deleting PostgreSQL database files,” earlier in this chapter.

Delete the backup copies of the following files, which you created when you copied the configuration and database files from your previous System Console to System Console 3.1.1:

- .configured
- umconfig.xml
- web.xml



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