

Course Exercises Guide

# IBM Aspera Console Administration

Course code WT012 / ZT012 ERC 1.0



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# Exercises description

## Introduction

The exercises for this course are designed to give you experience applying the concepts and procedures that are presented in the lecture component of the course.

It is assumed that you have a basic understanding of navigating in the Windows and Linux environments and performing basic Windows and Linux administrative functions.

It is also assumed you completed the ZT011G course and is comfortable working with the IBM Aspera High-Speed Transfer Server.

Each exercise builds on the tasks that are completed in the previous exercise, so it is important to do the exercises in the proper order.



### Information

Online course material updates might exist for this course. To check for updates, see the Instructor wiki at <http://ibm.biz/CloudEduCourses>.

## List of exercises

This course includes the following exercises:

- Exercise 1: Installing and Configuring IBM Aspera Console
- Exercise 2: Adding and configuring Console nodes
- Exercise 3: Managing Console users and groups
- Exercise 4: Creating and managing transfers
- Exercise 5: Defining and generating Console reports



### Important

Before working on lab exercises, it is important to read the information below which explains how to access and manage the servers in the lab environment.

Each exercise is divided into sections with a series of numbered steps and lettered substeps:

- The numbered steps (1, 2, 3) represent primary actions to be performed.
- The lettered substeps (a, b, c) provide details for completing the tasks that make up the action.

# Login credentials

The following table lists the various login accounts and passwords that are used throughout the exercises. The password that is used for each account is the same, making it easier to remember the required login credentials as you work through the exercises. However, credentials are also listed in the guide when needed.

<b>Server</b>	<b>User ID</b>	<b>Password</b>
Singapore	Administrator	passw0rd
Singapore	svcAspera	Password
Singapore	xfer	passw0rd
Singapore (browser)	admin2	Passw0rd_
Singapore (browser)	con_admin	Passw0rd_
Singapore (browser)	acme	Passw0rd_
Denver	root	passw0rd
Denver	user1	passw0rd
London	root	passw0rd
London	xfer	passw0rd



## Note

*You are not required to perform any of the following tasks currently! However, it is important to read this introduction to understand the Soleil environment as you work on the exercises.*

# The lab environment

Both the Windows and Linux servers in the lab environment are configured to provide all required services and features to support the IBM Aspera Console software. All three servers have the IBM Aspera High-Speed Transfer Server installed. Additionally the firewall is disabled on all servers.

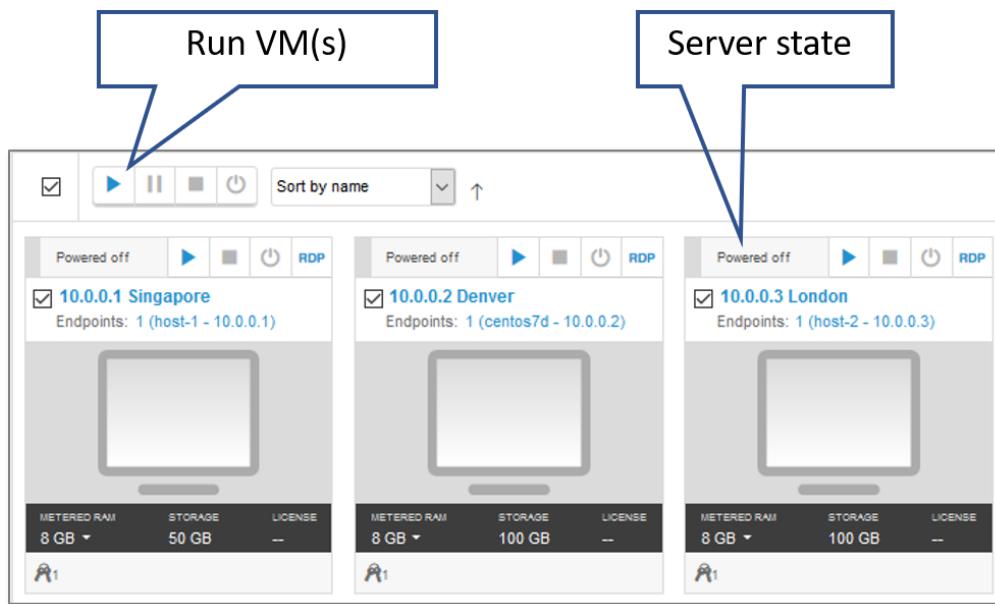
The provided lab environment provides an integrated interface to the servers provided to complete the laboratory exercises of this course. When you first connect to the environment, a page is presented that provides an interface to manage the servers included in the lab environment. The lab environment consists of three servers that are named: *Singapore*, *Denver*, and *London*.

## Server states

The state of each server is displayed when you access the lab environment. Server states are **Powered off**, **Running**, **Suspended**, or **Busy**.

Servers can be managed as a group or individually. Normally you manage power on servers as a group, but each server provides the same options as the options provided for the group of servers.

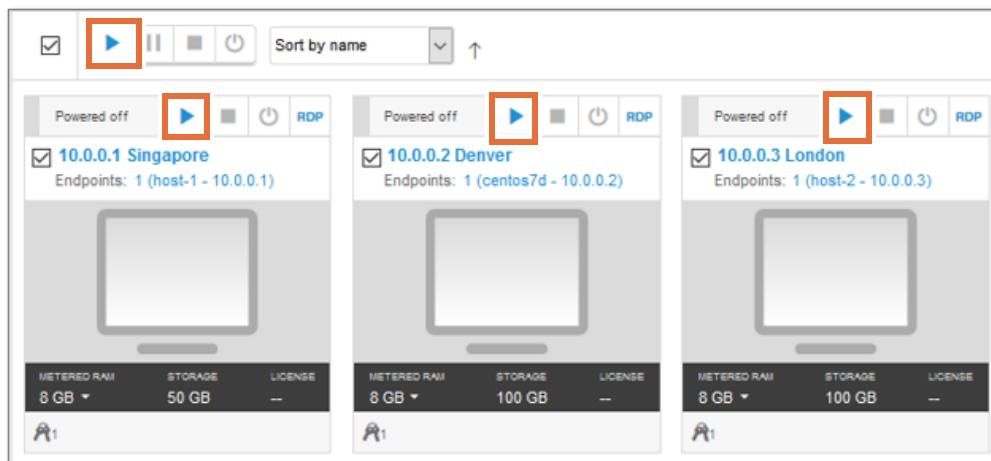
The **Run VM(s)** button is used to change the servers from a **Powered off** or **Suspended** state to a **Running** state.



### Power on servers

Servers in the lab environment must be powered on and running before beginning any exercise.

- \_\_\_ 1. Power on all server simultaneously.
  - \_\_\_ a. Confirm that the check boxes are selected for each server.
  - \_\_\_ b. Click the **Run VM(s)** button, as shown in the previous figure.



Each server state changes to **Busy** while transitioning from one state to another. Server status changes to **Running** when the servers become active.





## Information

If a server appears Busy for an inordinately long period (3 minutes or more), close the web page and reconnect to the lab environment.

After the systems are successfully powered on, the status of each system changes to Running.



## Accessing servers

After the servers states change to **Running**, you have two ways to access the individual servers, either with Remote Desktop (RDP) or with the browser.

### Connect with an RDP connection

If your computer system supports RDP, the next few steps describe the process to access a server with RDP.



### Important

If your system does NOT support RDP, skip to the *Connect by using a browser* section located later in this introduction.

Each server provides an RDP link to open an RDP connection to that server.

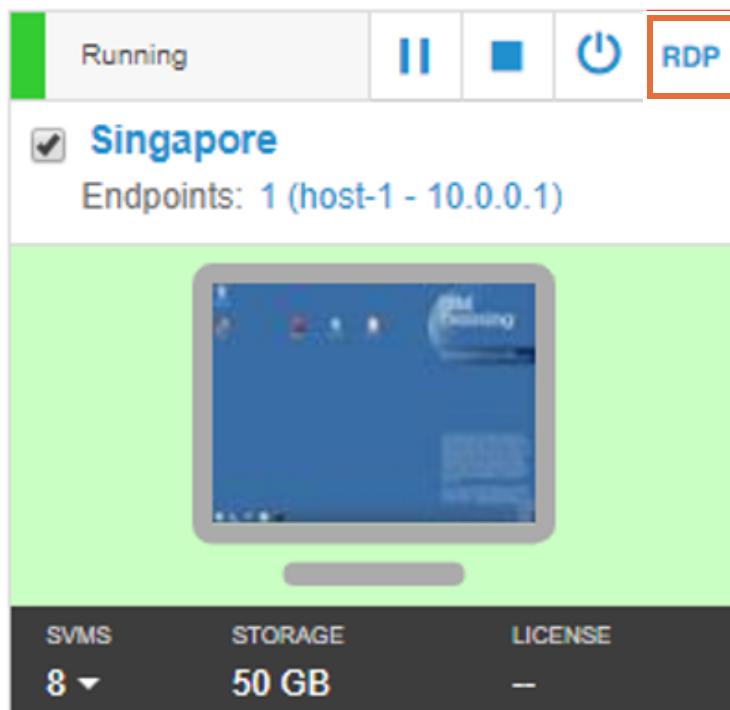


**Note**

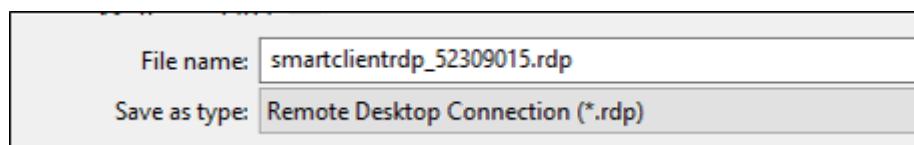
The value of using RDP connections is that you might open RDP sessions for all three servers simultaneously in separate windows. When you need to perform tasks on a different system, the associated RDP session is immediately available in another window.

Another advantage of using RDP is that it has less lag time than through the browser.

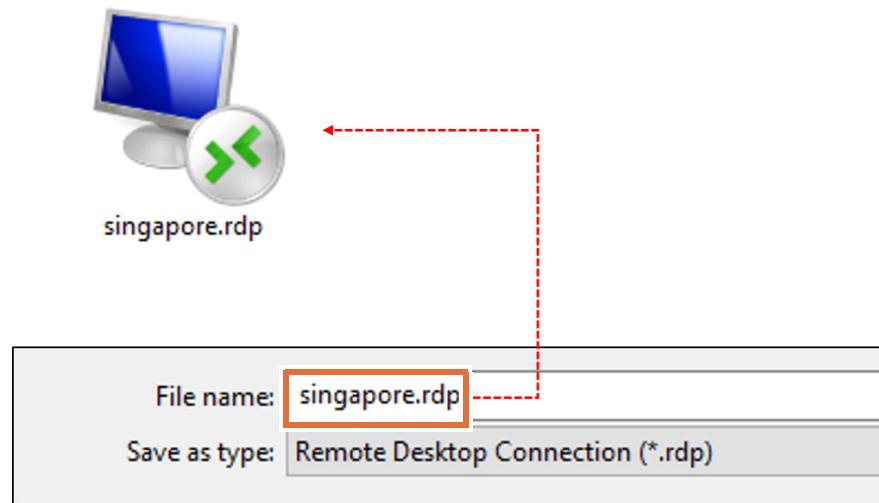
- \_\_\_ 1. Open an RDP session for the Singapore server.
- \_\_\_ a. Click RDP on the Singapore server to start the process of accessing the server environment.



The first time that you click the RDP link, the system asks to save an RDP configuration file. When the system attempts to save the RDP configuration file, it asks to save the file with a name like smartclientRDP\_4995563.rdp. It might be preferable to use the same name as the server it accesses rather than trying to remember which number is associated with which system.



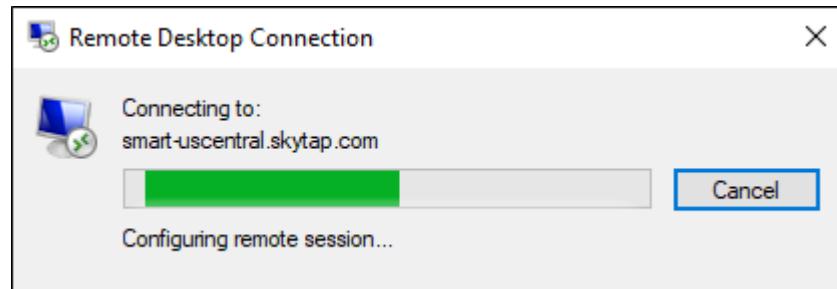
- \_\_\_ b. Save the RDP configuration file with the same name as the server it is associated with, in this case singapore.rdp.

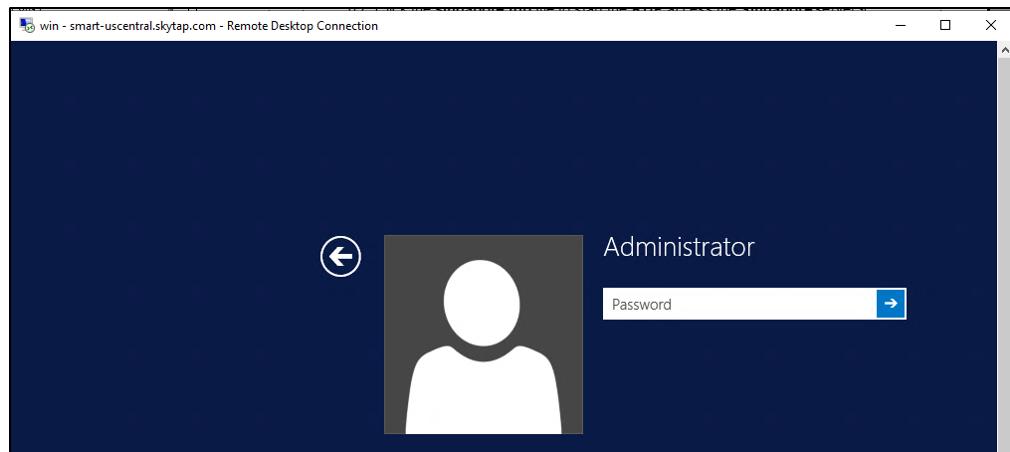


- \_\_\_ c. Create a .rdp file for the other two servers (Denver and London) by clicking the RDP link of each server. Save the configuration file with the same name as the server, for example, denver.rdp and london.rdp.



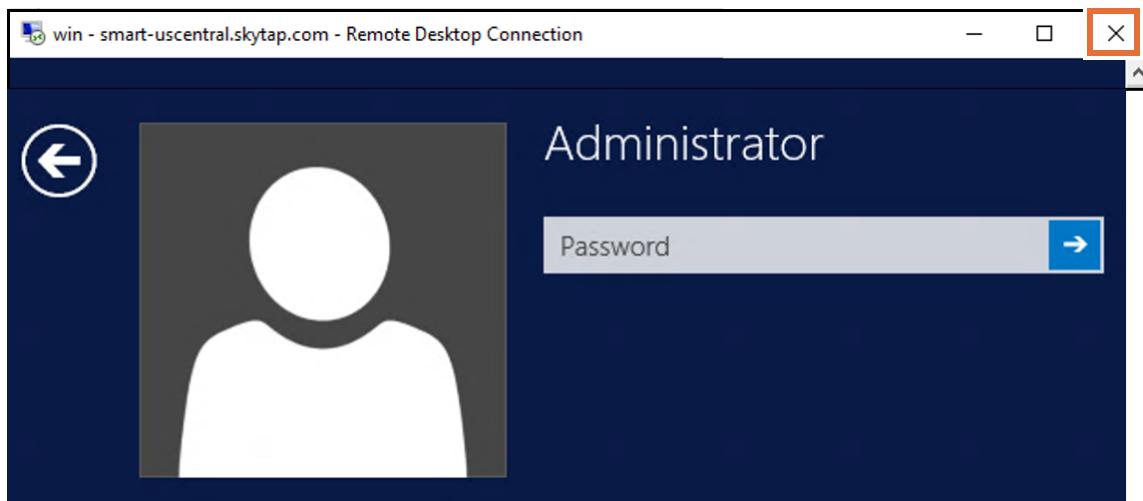
- \_\_\_ d. Double-click the singapore.rdp file to start the RDP access to the Singapore server login page.





The previous steps explained the process of accessing a server with an RDP connection. Next, you close the RDP connection and start a connection by using the browser.

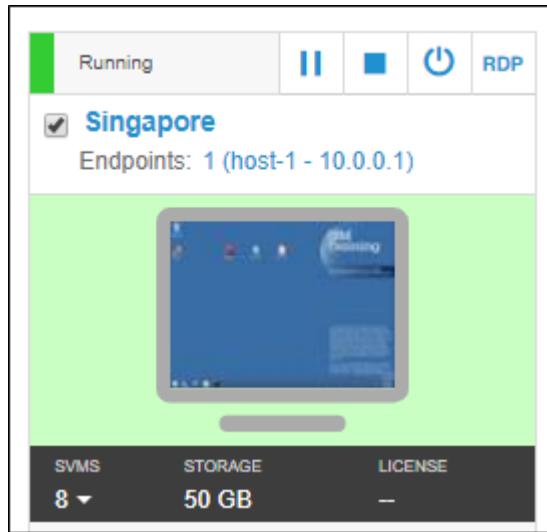
- 2. Close the RDP connection to the Singapore server by clicking X at the upper right side of the window.



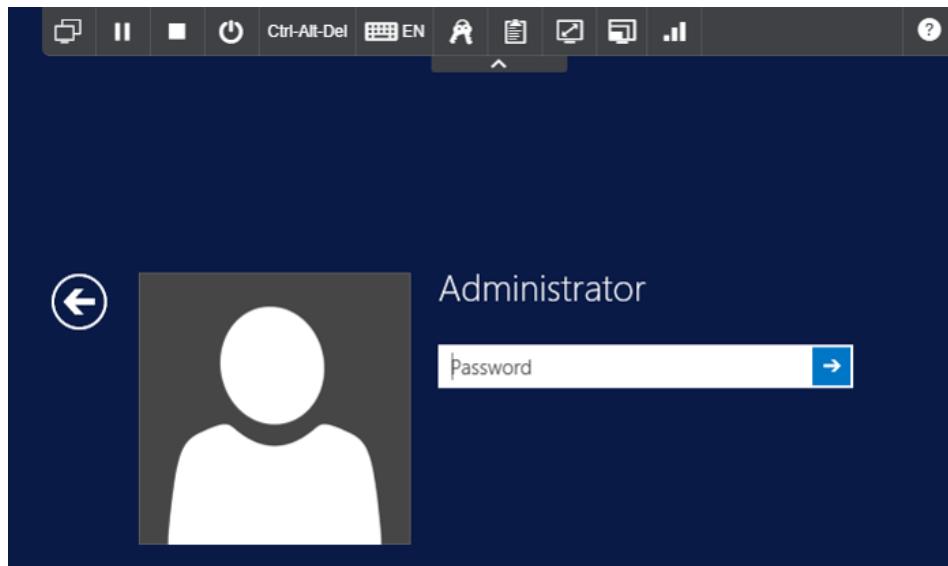
### Connect with a browser

If your computer system does not support RDP, you can access a server by using a browser connection to that server.

- 1. Open a connection to the Singapore server by using the browser.
  - a. Click the Singapore server image to open a connection to the Singapore login page.

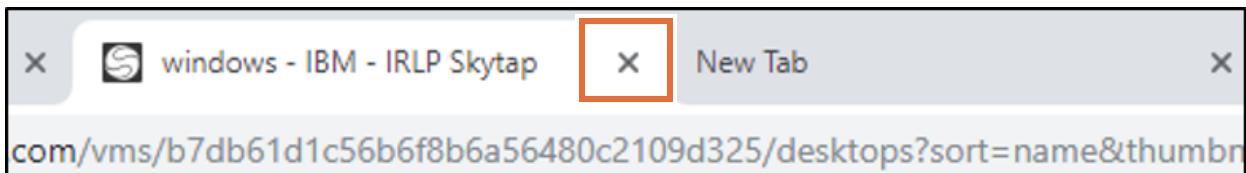


The login page is displayed.



The lab environment presents a single window that requires you to switch from one server to another within the same screen. So, the environment provides several features for managing the environment. Details about using these features are presented in the Managing the lab environment section towards the end of this introductory module.

2. Close the browser connection to the Singapore server by closing the browser window.



**Note**

Closing a connection to a server is not the same as logging out of a server. If you are logged in to a server when you close the connection, you remain logged in when you reopen the connection.

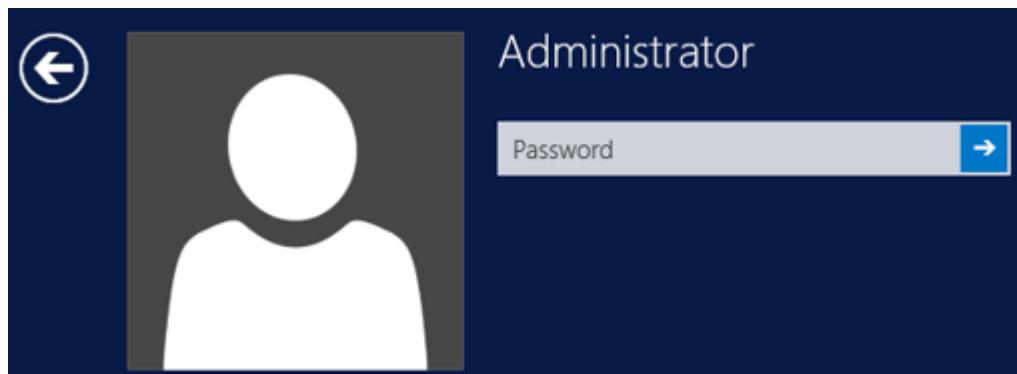
## Logging in and logging off servers

After you access the server environment with either RDP or the browser, you need to log in to the selected server. The following steps take you through the process of logging in to and logging off servers in the lab environment. No actual tasks are required on the servers other than to learn the login and logout process.

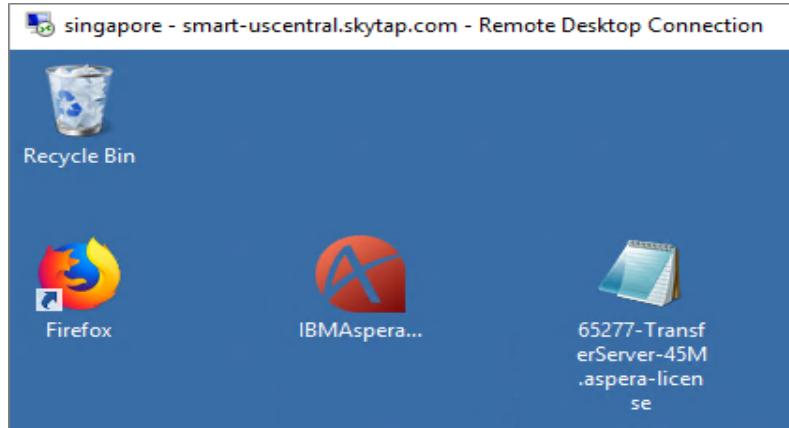
The login and logout processes differ slightly between the Singapore server, which is running Windows Server 2012, and the Denver and London servers, which are running CentOS Linux.

The following tasks are designed to acquaint you with the login and logout procedures on the different types of servers. First, you log in to the Singapore server as an example of logging in to a Windows server, then log out. Next, you log in to the Denver server as an example of logging in to a Linux system, and then log out of it as well.

- \_\_\_ 1. Log in to the Singapore server.
  - \_\_\_ a. Open a connection to the Singapore server with RDP or the browser, depending upon what your computer supports.
  - \_\_\_ b. Log in with the following credentials:
    - User:Administrator
    - Password:passw0rd



The Administrator desktop is displayed.



- \_\_\_ 2. Log off from the Singapore server.
- \_\_\_ a. Click **Start** at the lower left of the screen.



- \_\_\_ b. Click **Administrator** at the upper right of the screen and select **Sign out**.



The login screen shows all available user accounts for login.



- \_\_\_ 3. Log in to the Denver server.
- \_\_\_ a. Open a connection to the Denver server with RDP or the browser, depending upon what your computer supports.

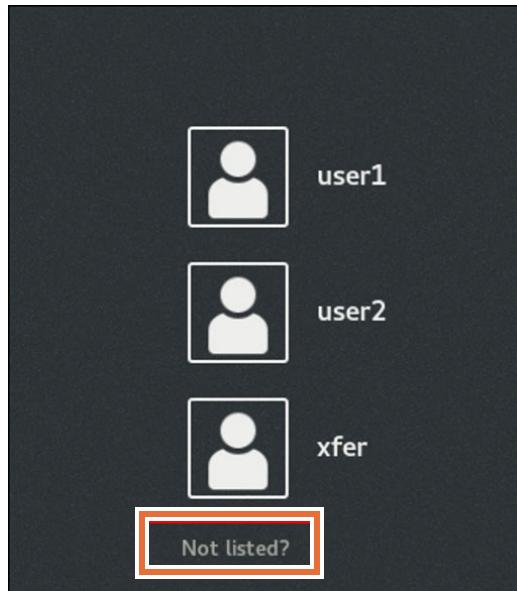
The first time that you access a Linux server, a blue page is displayed, regardless of which access method you are using.

- \_\_\_ b. Click the mouse in the page and press **Enter** to access the login screen.

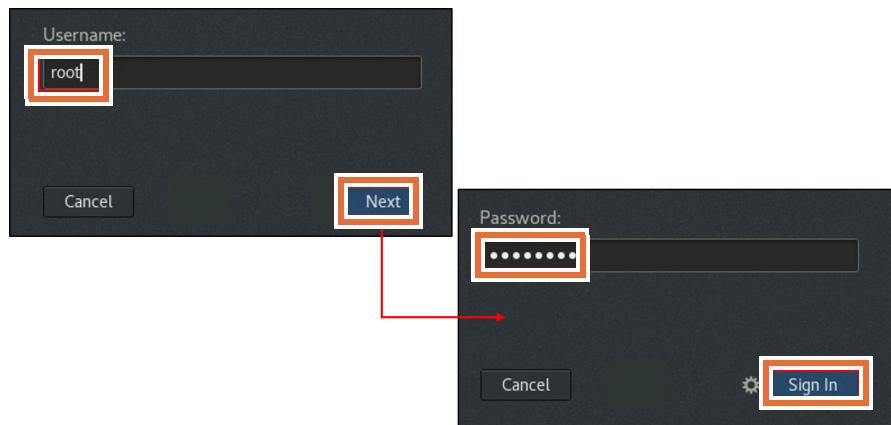


### Note

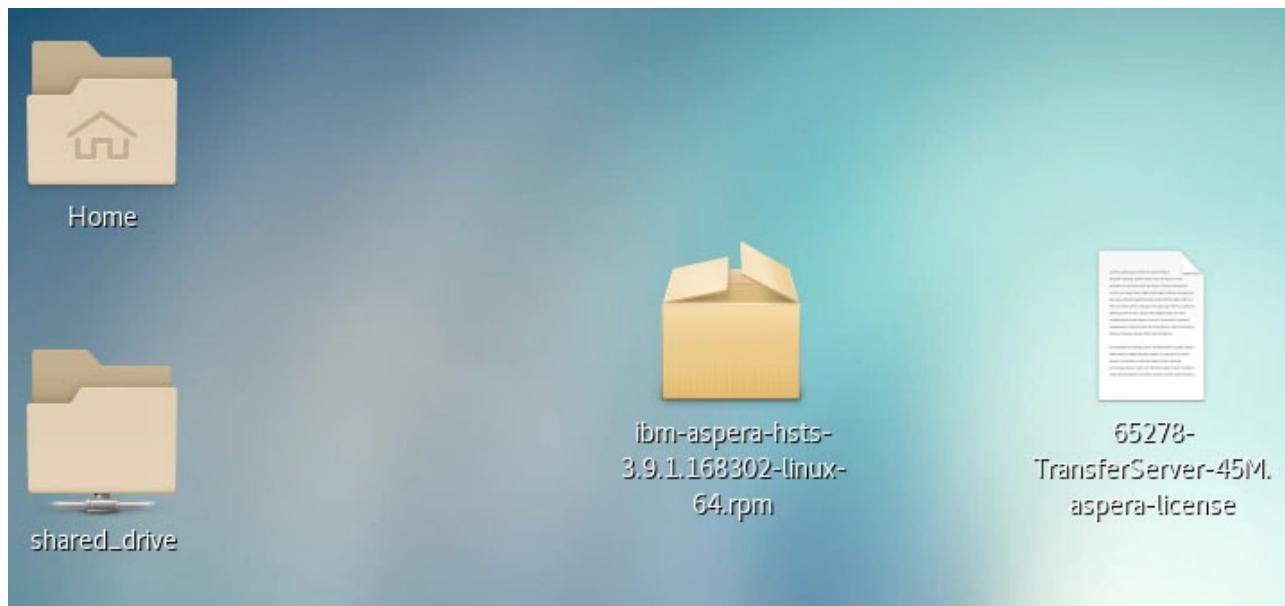
You might encounter a blue screen at other times when working with the lab systems. If so, click the mouse in the screen and press **Enter**.



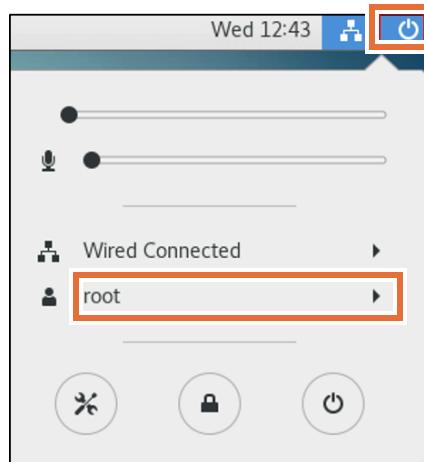
- \_\_\_ c. Click **Not listed** at the bottom of the page.  
\_\_\_ d. Enter **root** in the Username field.  
\_\_\_ e. Press **Enter** or click **Next**.  
\_\_\_ f. Type **passw0rd** in the Password field and press **Enter** or click **Sign In**.



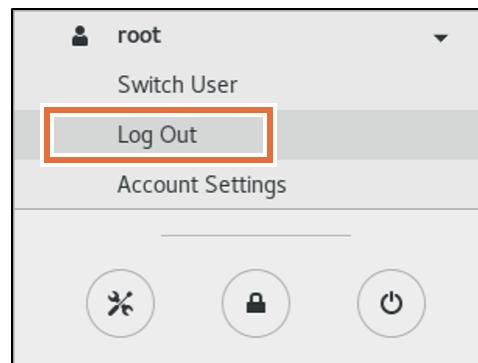
The root Desktop opens.



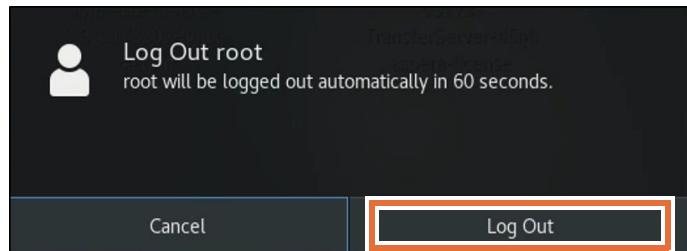
- \_\_\_ 4. Log off from the Denver server.
  - \_\_\_ a. Click the Power icon at the upper right of the screen.



- \_\_\_ b. Click **root** and select **Log Out**.



- \_\_\_ c. Click **Log Out** to confirm.



The login page is shown again.

## Managing the lab environment



### Important

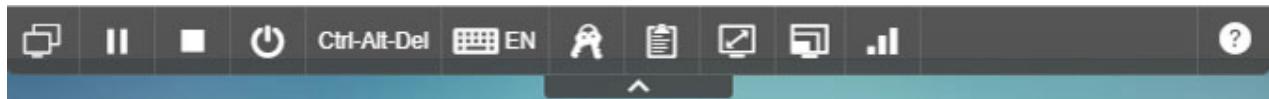
The information in the following section applies only if you are using a browser connection. If you use RDP to access the servers, skip to the *General exercise information* section.

If you are using RDP to access the servers, each screen is separate and no special tools are needed to switch between servers.

However, if you connect to the servers with a browser, the lab environment provides features that make it more efficient to use. The following pages discuss some of the features you might need when working in the lab environment.

### The lab environment menu

After logging on to a server, a menu is displayed at the top of the screen. The features of the lab environment are accessed through this menu.



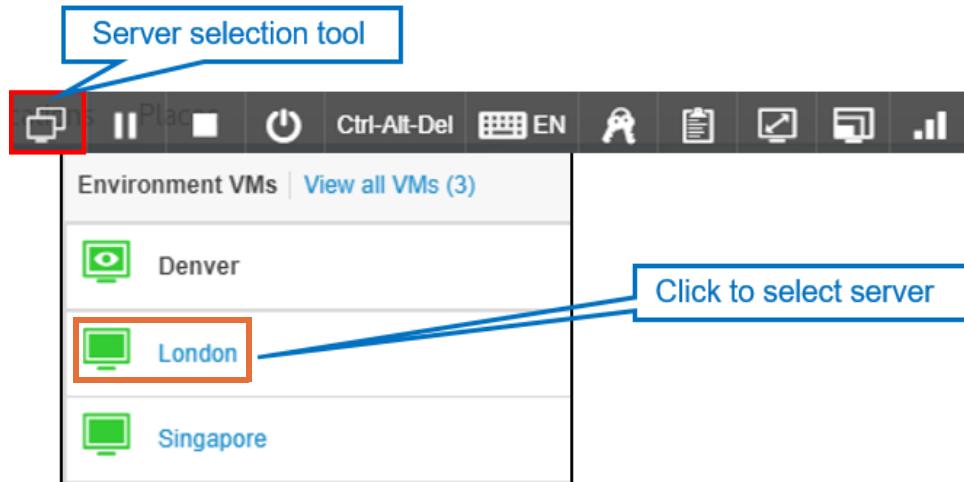
If the menu obscures your view, move the screen out of the way by clicking the up mark at the bottom of the menu. When you need to use it again, click the down mark.



## Switching between servers

You can switch to a different server by using the Server selection tool at the left side of the lab environment menu. The goal of the next few steps is to use the Server selection tool to switch the screen between servers. No tasks are performed on either server, and you switch between them only to see how the Server selection tool is used.

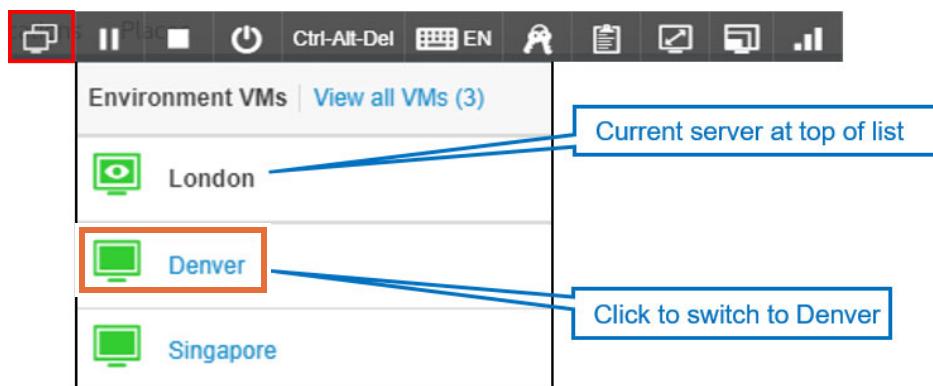
- 1. Switch from the Denver server to the London server.
  - a. Access the Denver server by using a browser connection.
  - b. Log on to the Denver server by using these credentials:
    - Username: **root**
    - Password: **Passw0rd**
  - c. Click the Server selection icon at the top of the screen to view the three servers.
  - d. Click **London** to switch the screen to the London server.



### Note

Notice that the server you are currently connected to is shown at the top of the menu.

- 2. Switch to the Denver server.
- a. Click the Server selection icon and select **Denver** to switch back to the Denver server.

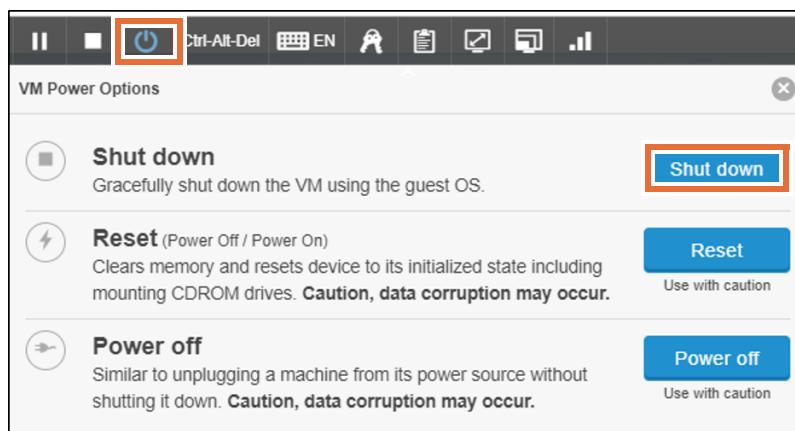


## Other lab environment features

In addition to switching between servers, the lab environment links at the top of the screen also facilitate several other useful features. These features include shutting down or rebooting the server operating system, copying text between your local system and the lab environment, and resetting the screen resolution.

### Shutting down and rebooting servers

- 1. Shut down the **Denver** server.
- a. If necessary, log on to the Denver server.
- b. Click the Power management icon (NOT the Power on icon) in the lab environment menu.



- c. Click **Shutdown** to gracefully shut down the system.



### Important

Do NOT use the Reset or Power off options in this menu. Only the Shutdown option should be used.

As the server is shut down, the screen changes to black with a spinning circle inside a terminal window. After the server is shut down, the spinning circle changes to a terminal with a power on symbol inside it.



- \_\_\_ d. Click the Server selection icon and select **View all VMs (3)**.

Server	Status	Endpoints	SVMS	Storage	LICENSE
Denver	Powered off	1 (centos7d - 10.0.0.2)	8	100 GB	--
London	Running	1 (host-2 - 10.0.0.3)	8	100 GB	--
Singapore	Running	1 (host-1 - 10.0.0.1)	8	50 GB	--

The status of the Denver system is Powered off, while the state of the other servers is Running.

- \_\_\_ e. Click the Power on icon next to the status field of the Denver server to power it back on.

The status of the Denver server changes to Busy, and eventually to Running.

**Note**

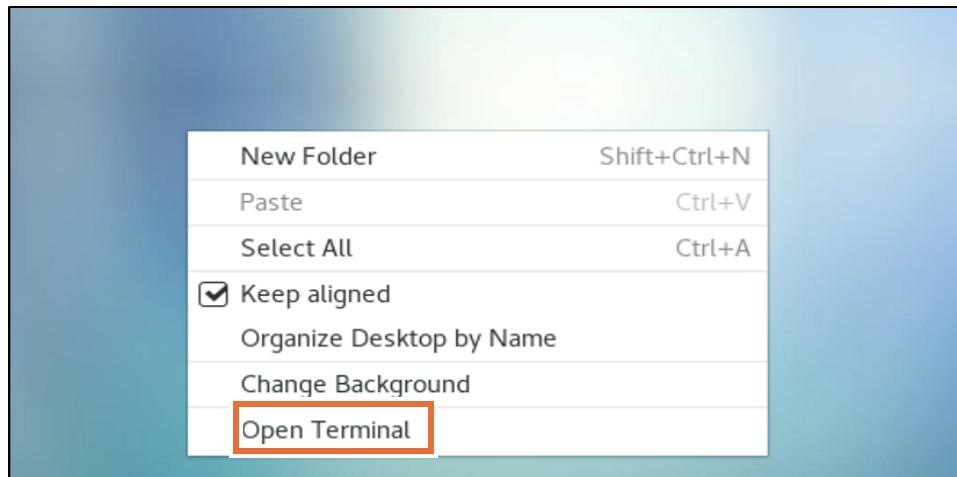
Occasionally the server status remains Busy for a longer than normal amount of time. If that happens, close the browser window to the entire URL and reconnect. The status should then be Running.

**Copying text between your PC and a server**

The lab environment menu also provides a feature to copy text between the server you are working on and your local PC. The VM Clipboard link is used to copy text entries from this guide to the system where commands are run.

Keep in mind that only text can be copied between your local system and the lab server.

- \_\_\_ 1. Copy text from your local system to the Denver server.
  - \_\_\_ a. Click the Denver image to open the login screen.
  - \_\_\_ b. Log in using these credentials:
    - Username:**root**
    - Password:**Passw0rd**
  - \_\_\_ c. Place the mouse in the Desktop and use the right mouse button and select the Open Terminal option.



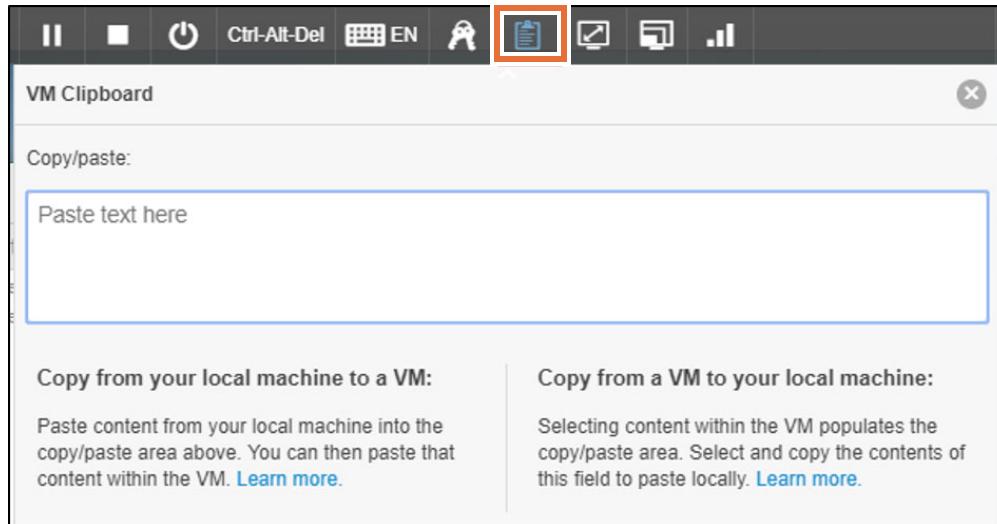
A terminal window opens.

```
root@denver:~$  
File Edit View Search Terminal Help  
[root@denver ~]#
```

- \_\_\_ d. Copy the following line from this guide by highlighting it and entering CTRL C (or CMD C if using a Mac).

```
ls /root
```

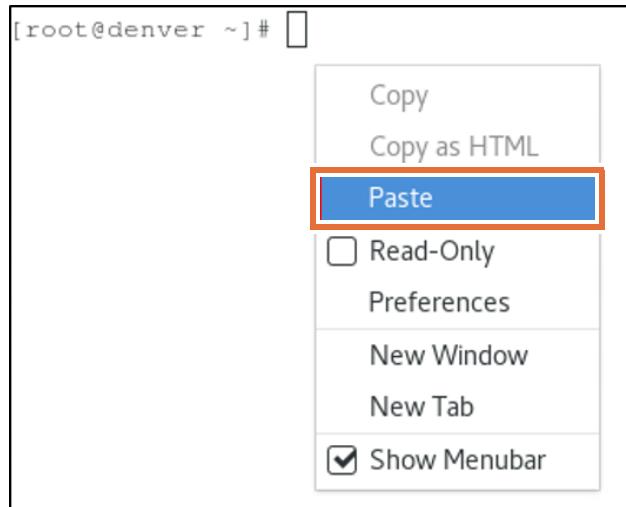
- \_\_\_ e. Click the Clipboard icon in the lab environment menu to open the VM Clipboard.



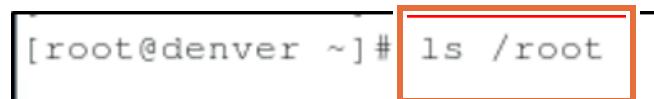
- \_\_\_ f. Use the **CTRL V** keys (**CMD V** on a Mac) to paste the copied text into the **Paste text here** section of the VM Clipboard.

The VM Clipboard screen disappears.

- \_\_\_ g. Move the cursor into the terminal window and use the right mouse button to open the file management menu - select **Paste**.



The text is copied into the command line of the server.



\_\_ h. Press Enter to run the command you pasted into the server.

```
[root@denver ~]# ls /root
anaconda-ks.cfg  Downloads          Music           Public      Videos
Desktop          initial-setup-ks.cfg original-ks.cfg Templates
Documents         ks-post.log        Pictures        tmp
```

## General exercise information

Lab exercises should be performed on the pre-configured Windows (Singapore) and CentOS Linux server systems (Denver & London) provided in the lab environment.

Most administrative tasks for IBM Aspera Console systems require administrative rights on the systems. You use the root user account to log in to the two Linux systems and the Administrator user account to log in to the Windows server.

When working on deployment systems, remember to consider file and directory permissions for non-administrative users.



### Important

The exercises call for numerous changes between servers for configuration and testing transfers. When a change in server is required, the step starts with the underlined phrase **Switch to Singapore**, or **Switch to Denver**, or **Switch to London**. It is important to run the identified tasks on the correct server to experience the expected results.

# Exercise 1. Installing and configuring IBM Aspera Console

## Estimated time

01:00

## Overview

While the installation of Aspera Console is not difficult, there are some additional configuration tasks that are typically performed during the installation process. This exercise explores some of those tasks. Most of the tasks are performed on the Windows system, but some tasks require you to use the Linux systems as well.

## Objectives

After completing this exercise, you should be able to:

- Install IBM Aspera Console
- Navigate the Aspera Console user interface
- Configure email notifications
- Configure Console system defaults

## Introduction

While the installation of Aspera Console is not difficult, there are some additional configuration tasks that are typically performed during the installation process. This exercise explores some of those tasks. Most of the tasks are performed on the Windows system, but some tasks require you to use the Linux systems as well.

## Requirements

For this exercise, you use a Windows and a Linux server that are provided in the lab environment.

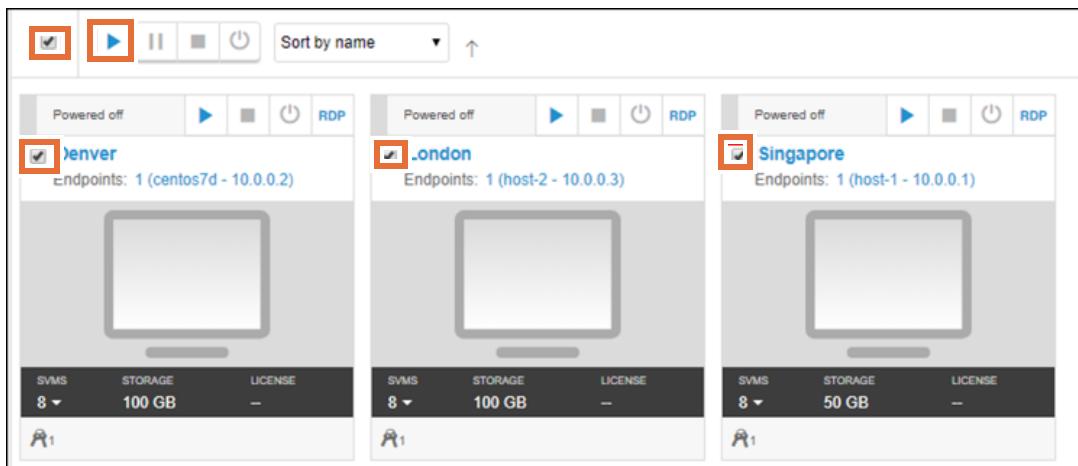
# 1.1. Installing IBM Aspera Console

Both the Windows and the Linux servers provided in the lab environment are configured to provide most required services and features to support the IBM Aspera Console software. Additionally, the firewall on these servers is disabled. For normal deployments, you need to confirm that the systems meet the prerequisite configuration that is specified in the *IBM Aspera Console Administration Guide*.

The IBM Aspera High-Speed Transfer Server software is installed on all three servers in the lab environment. You configure all three of these systems as Aspera nodes as part of another exercise, even though the Aspera Console application is installed on the same system as the Aspera Transfer Server software. The transfer server function of the system where Console is installed can be configured as a node and is recognized by Aspera Console as another node in the Aspera environment.

## 1.1.1. Installing IBM Aspera Console on Windows systems

- 1. Start all servers in the lab environment by clicking the **Run the VM** button at the top of the opening page.



- 2. After the status of the Singapore server changes to Running, open the RDP connection to the Singapore system.

Or, open a browser connection by clicking the Singapore server in the lab environment.



### Note

See the **Lab Environment** section of the **Exercise Description** at the beginning of this guide for details about accessing the server images and working within the lab environment.

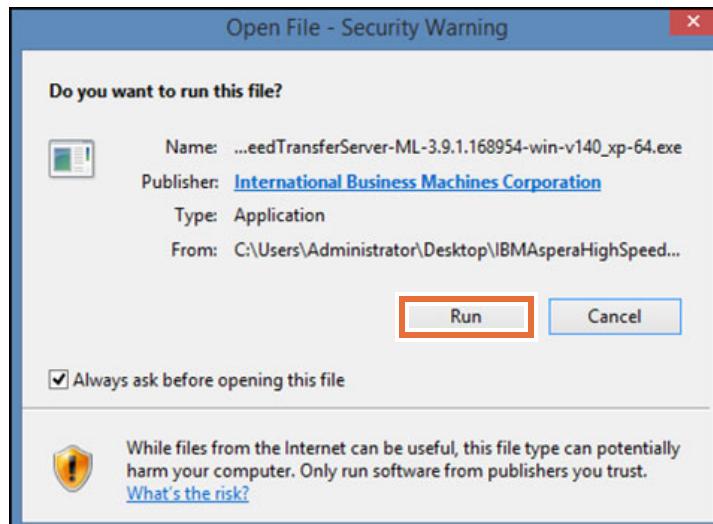
- 3. Sign in with these credentials:

- Username: **Administrator**
- Password: **passw0rd**

- 4. On the Desktop, double-click the IBM Aspera Console installer.



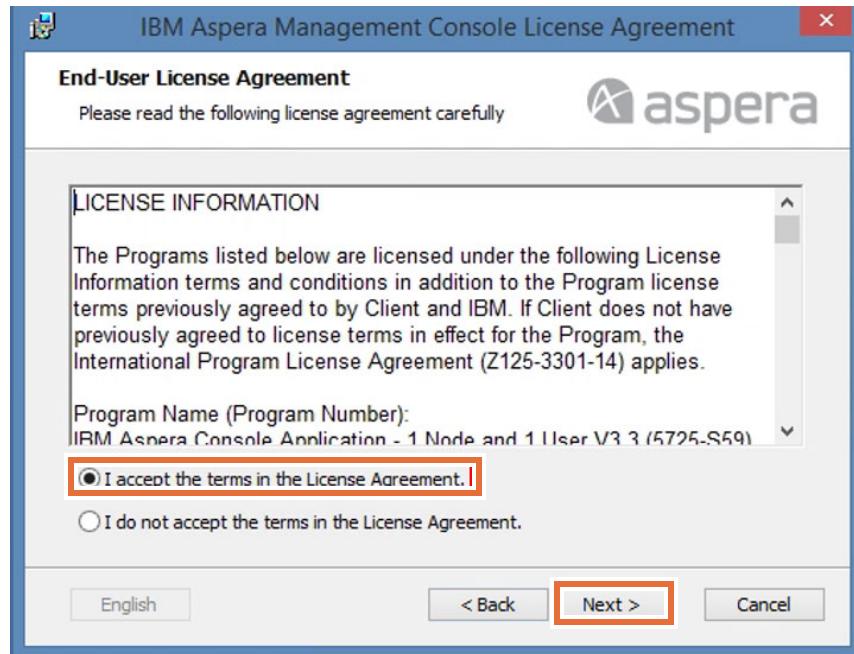
- 5. Click **Run**.



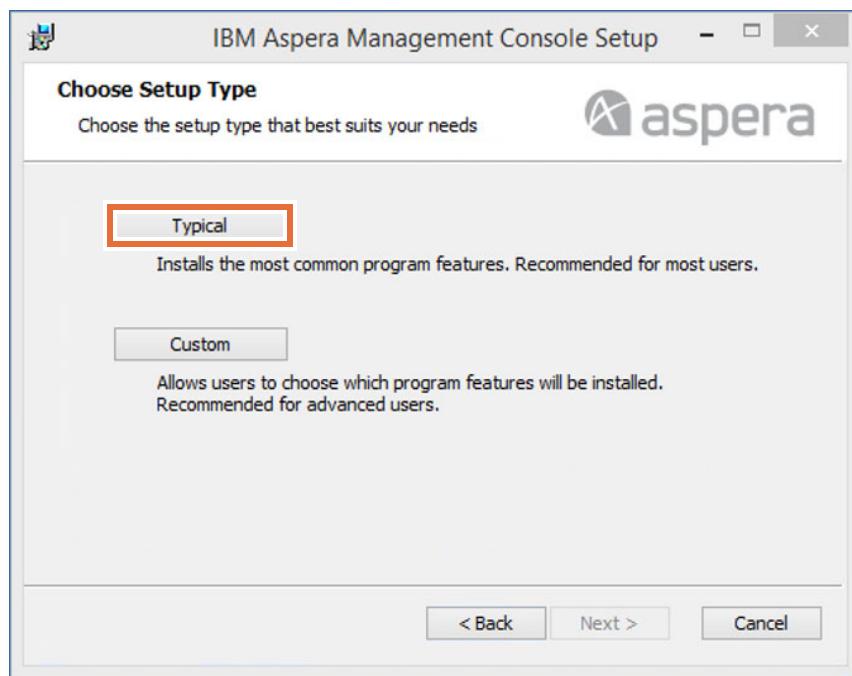
- 6. Click **Next**.



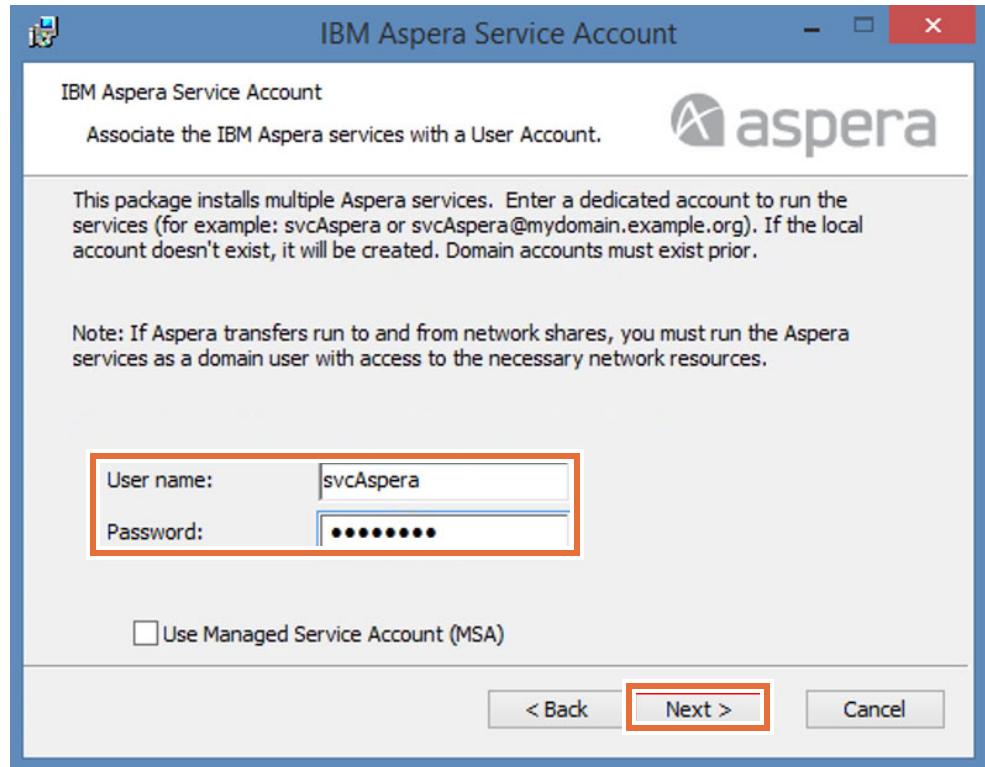
- \_\_\_ 7. Select **I accept the terms in the License Agreement** checkbox.
- \_\_\_ 8. Click **Next**.



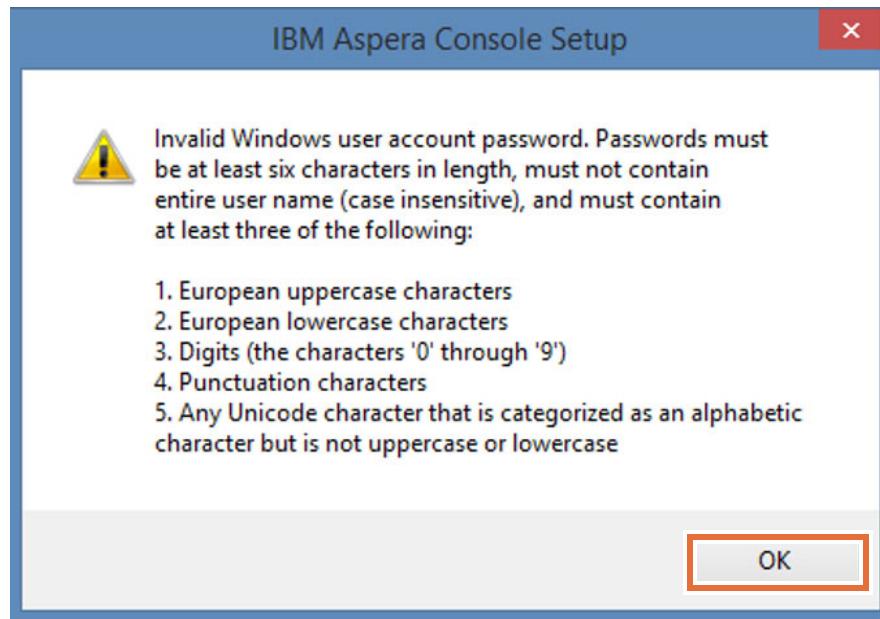
- \_\_\_ 9. Click **Typical**.
- \_\_\_ 10. Click **Next**.



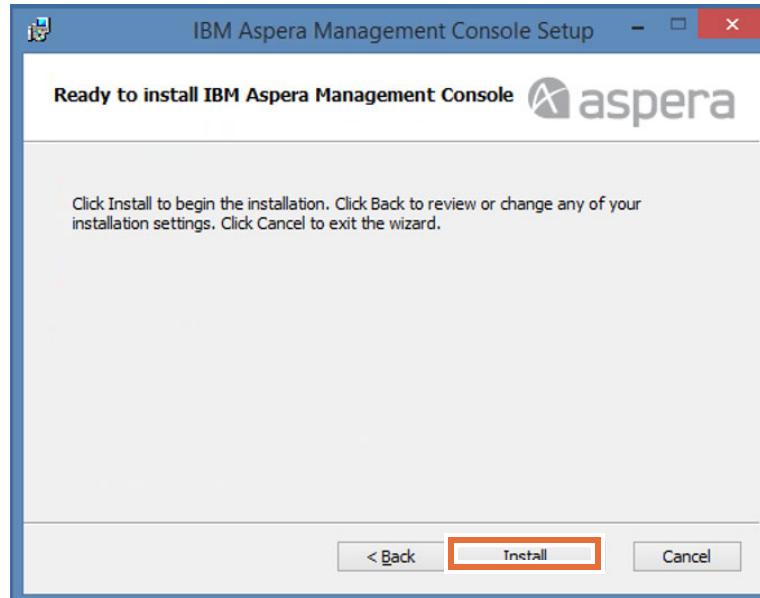
- \_\_\_ 11. In the IBM Aspera Service Account window, enter these credentials:
  - User name: **svcAspera**
  - Password: **passw0rd**
- \_\_\_ 12. Click **Next**.



You see a message that the password you entered is invalid.



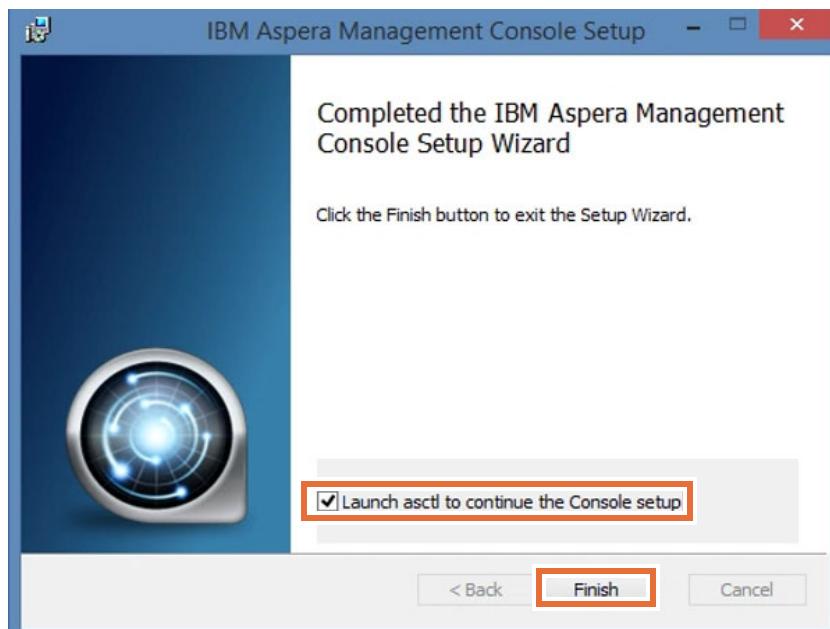
- \_\_\_ 13. Click **OK** to return to the IBM Aspera Service Account page.
- \_\_\_ 14. Change the password to **Passw0rd**
- \_\_\_ 15. Click **Next**.
- \_\_\_ 16. Click **Install**.



The installation process starts, extracting and copying the necessary files to the local system.

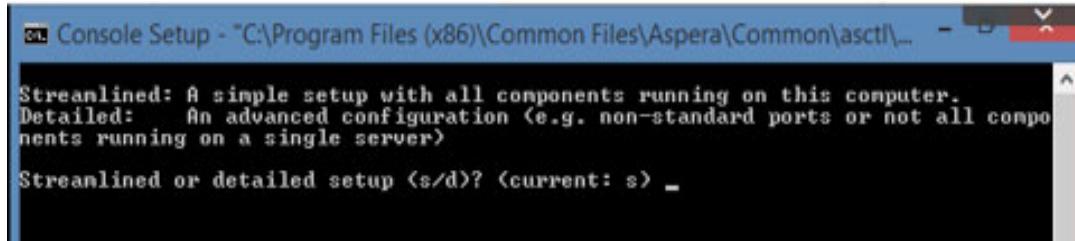
The **Launch asctl to continue the Console setup** option is selected by default. This setting starts the `asctl console: setup` routine for configuring the initial Aspera Console system settings.

— 17. Click **Finish**.



### 1.1.1.1. Configure initial system settings with `asctl`

In this section, you use the `asctl console:setup` routine to configure the Aspera Console..



- 1. Respond to the following prompts by typing in the corresponding values. Press enter after each response:

Prompt	Input Value
Streamlined or detailed setup <s/d>? <current: s>	s
Choose a login name or the new admin user:	con_admin
Enter the email address for con_admin:	con_admin@example.com
Enter the password for con_admin:	aspera
Confirm:	aspera
Please enter a new MySQL root password:	passw0rd
Confirm:	passw0rd
MySQL will need to start/restart during configuration. Continue?<y/n>	y
What hostname or IP address should Apache use to identify itself?	10.0.0.1
What IP addresses and hostnames are allowed to access Console?	localhost,10.0.0.1,london,10.0.0.3



#### Note

For security purposes, Aspera Console can be configured to allow access from specified systems only. The question, What IP addresses and hostnames are allowed to access Aspera Console, identifies the systems that are allowed to connect to the Aspera Console application. If a user attempts to access Aspera Console from a system that is not configured as an allowed system, the login page is not available to them.

After installation, you can edit the list of accepted IP addresses and hostnames by modifying the `AcceptedHosts` entry in the `console.rb.yml` configuration file. For more information, see the Allowing IP Addresses to Access Console section of the *IBM Aspera Console Administration Guide*.

```

Streamlined: A simple setup with all components running on this computer.
Detailed: An advanced configuration (e.g. non-standard ports or not all components running on a single server)

Streamlined or detailed setup (s/d)? (current: s) s

Console
Choose a login name for the new admin user (recommendation: don't use 'admin' or 'root'): con_admin
Enter the email address for con_admin: con_admin@example.com
Enter the password for con_admin:
Password: *****
Confirm: *****

MySQL
Please enter a new MySQL root password.
Password: *****
Confirm: *****
MySQL will need to start/restart during configuration. Continue (y/n)? (current t: y) y

Apache
What hostname or IP address should Apache use to identify itself (in the SSL Certificate)? 10.0.0.1
Key and certificate will be generated in this directory:
c:/Program Files (x86)/Common Files/Aspera/common/apache/conf
What IP addresses and hostnames are allowed to access Console? localhost,10.0.1,denver,10.0.0.2,london,10.0.0.3

```

The `asctl` routine summarizes your input and prompts you to continue.

- 2. If the information displayed is correct, enter **y**.

```

=====
Settings =====
MySQL
Enabled: true
Port: 4406
Apache
Enabled: true
Hostname: 10.0.0.1
Bind Address: 0.0.0.0
HTTP Port: 80
HTTPS Port: 443
Console
Enabled: true
DB Logger IP: 10.0.0.1
Accepted Host & IP (s): localhost,10.0.0.1,denver,10.0.0.2,london,10.0.0.3
Admin name: con_admin
Admin email: con_admin@example.com
MySQL is local: true

Are these settings correct? (y/n/x with x for exit) y

```

The `asctl console:setup` routine performs the required tasks and provides a report that indicates the status of each configuration task.

After the configuration is completed, you are asked to confirm that you want to restart Apache, MySQL, and Console.

- \_\_\_ 3. Answer **y** to each of the questions:

- Apache needs to be restarted, restart it now (y/n)? (default:y)
- MySQL needs to be restarted, restart it now (y/n)? (default:y)
- Console needs to be restarted, restart it now (y/n)? (default:y)

```
Apache needs to be restarted, restart it now (y/n)? (default:y) y
Apache: Start... done
MySQL needs to be restarted, restart it now (y/n)? (default:y) y
MySQL: Stop... done
MySQL: Start... done
Console needs to be restarted, restart it now (y/n)? (default:y) y
Console: Start... done
Reminders:
- Apache needs ports 80 and 443 open in firewalls.
- No Console license found. Please refer to the documentation to install your
Console license.
```

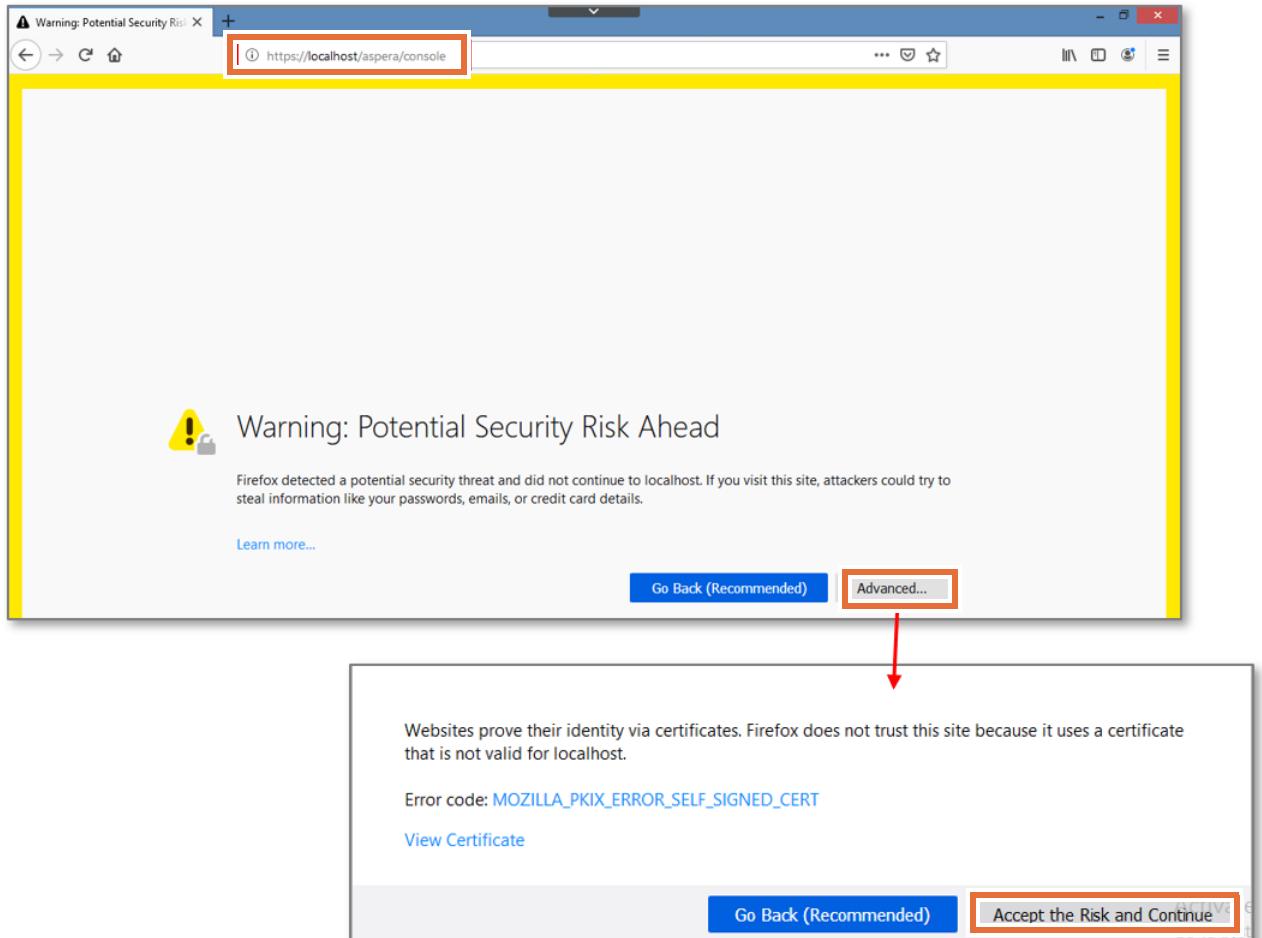
The last line of the summary indicates that a license must be added before Aspera Console can be used.

- \_\_\_ 4. Close the command prompt.

### 1.1.1.2. Install the license key

The following tasks step through the process of adding the license.

- \_\_\_ 1. Open a browser.
- \_\_\_ 2. Enter **localhost** in the browser's address bar.
- \_\_\_ 3. When prompted about security, click **Advanced**.  
Another window appears that provides the opportunity to Go Back or continue to the website.
- \_\_\_ 4. Click **Accept the Risk and Continue**.



The Aspera Console login page opens, indicating that a license is not installed.

- \_\_\_ 5. Sign in using these credentials:
  - Username: **con\_admin**
  - Password: **aspera**
- \_\_\_ 6. Click **Login**.

The screenshot shows the Aspera Console Login page. At the top, a red message reads: "Console license not found" and "Only admin logins permitted until this problem is resolved." Below this is a login form with fields for "Username" and "Password", and a "Login" button which is highlighted with a red box. To the right of the password field is a "Forgot Password" link. The Aspera logo is at the bottom.

Another page opens prompting you to change the password.

- \_\_\_ 7. Enter the following values in the fields:

- Current Password: **aspera**
- New Password: **Passw0rd**
- Confirm New Password: **Passw0rd**

- \_\_\_ 8. Click **Change Password**.

The screenshot shows the 'Change Password' dialog box within the IBM Aspera Console interface. The dialog box contains the following fields:

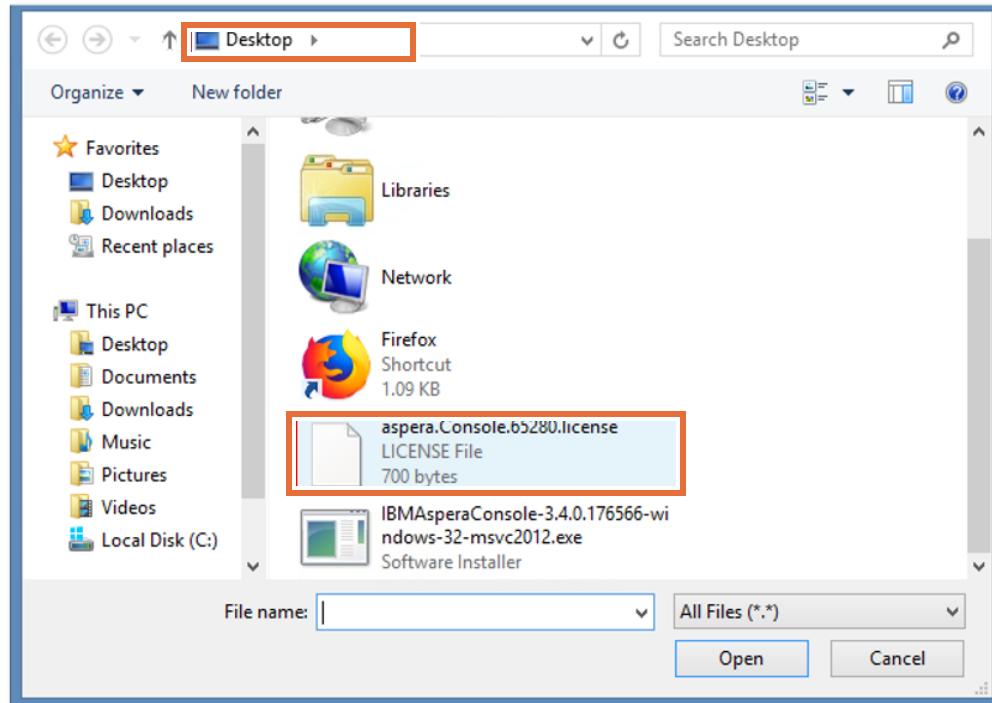
Username	con_admin
Current Password	*****
New Password	*****
Confirm New Password	*****

Below the fields is a blue 'Change Password' button. At the bottom right of the dialog box is the Aspera logo.

- \_\_\_ 9. Click **Upload a license file**.

The screenshot shows the 'Console Configuration' dialog box. It displays a success message: 'Password updated successfully.' Below it, there is a note: '■ You must paste or upload a valid console license before continuing'. A blue 'Upload a license file' button is visible. On the left, there is a 'Console License' section with a text area containing placeholder text 'Paste license text here.' At the bottom left is a 'Save' button.

- \_\_\_ 10. Select the **Desktop** as the directory to explore, then double-click the **aspera.Console.6580.license** file.



The **Console License** page reappears with the contents of the license file displayed

- 11. Click **Save**.

### Console Configuration

License updated successfully.

Defaults Proxy Cookies Map SSH Keys Background Database Custom Fields License

■ License
[Upload a license file](#)

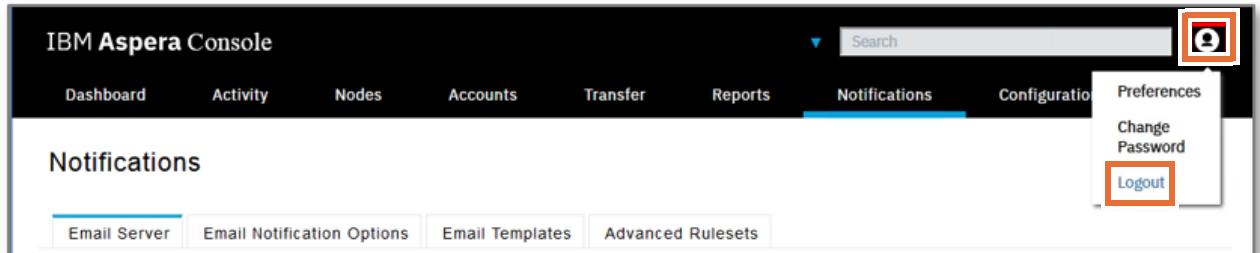
**Console License**

```
<ASPERA_LICENSE>
<DETAILS>
  expiration_date="2020-06-30"
  customer_name="aspera_eval"
  contract_number="eval-2019-q2"
  product_name="console"
  version_number="2.x"
  max_active_users="1000000000"
  max_managed_nodes="10"
  transfers_enabled="yes"
  license_uuid="0fe92be0-54cd-0137-790c-0242ac110005"/>
<KEY>
N+K39UXph4rEQPkHM2rluDr0Sizd1TmABaC5740a8nCGRMx7Cd+Cb2K0nc3
xINxPeDleovnKuDoFNIxZosgTDN+gxTXX9iZV/bh6rqm4icLRFbLwRKcd4
XoT5jCWbsS/V1VMaid1C68zBYDbHcy5hqtRHlg19ijnxAxQRCb3eGgbETN
yJ+EXNuS9LYiv+AQ0jkR1ZycMgWNjEmrChCLrn7xNiZb58Vm+7MPvUDJTNs
Hfw8Puwum7llesqvCvjLSh3z+JqtivVV02phm9QhCwQNUb2BYiaXbFJPnf
ENK/caGDC/VM73ciVDMtVkwmmVat9w4g2POjeKJQw==
</KEY>
</ASPERA_LICENSE>
```

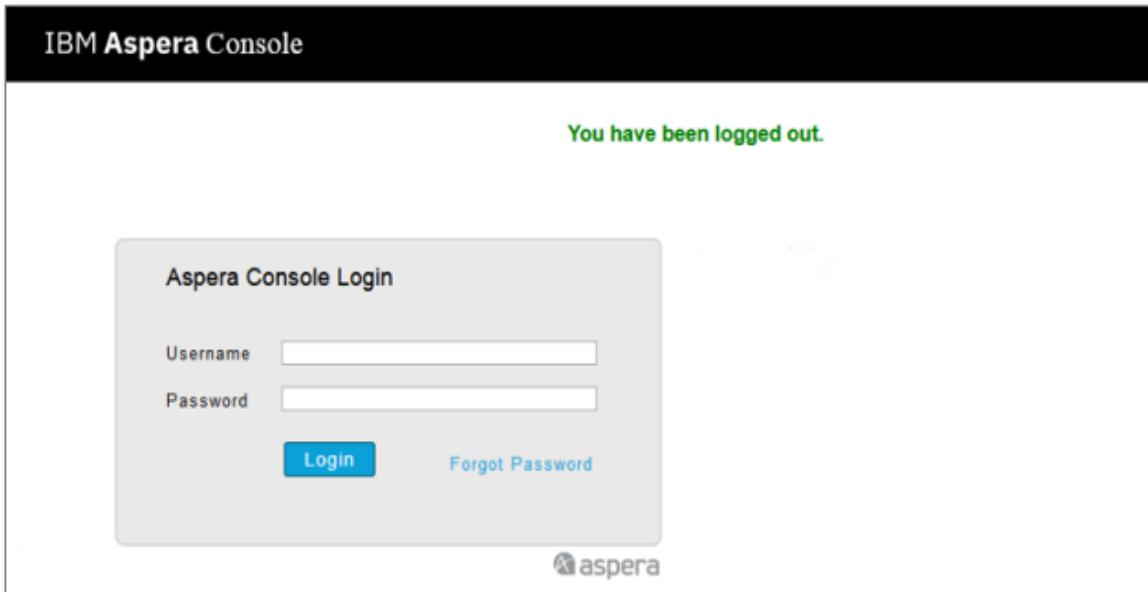
[Save](#)

The message at the top of the page indicates that the license is now updated.

Sign out of Aspera Console by clicking the user icon at the upper-right corner of the page and selecting **Logout** from the menu.



You see a message confirming that you are logged out..

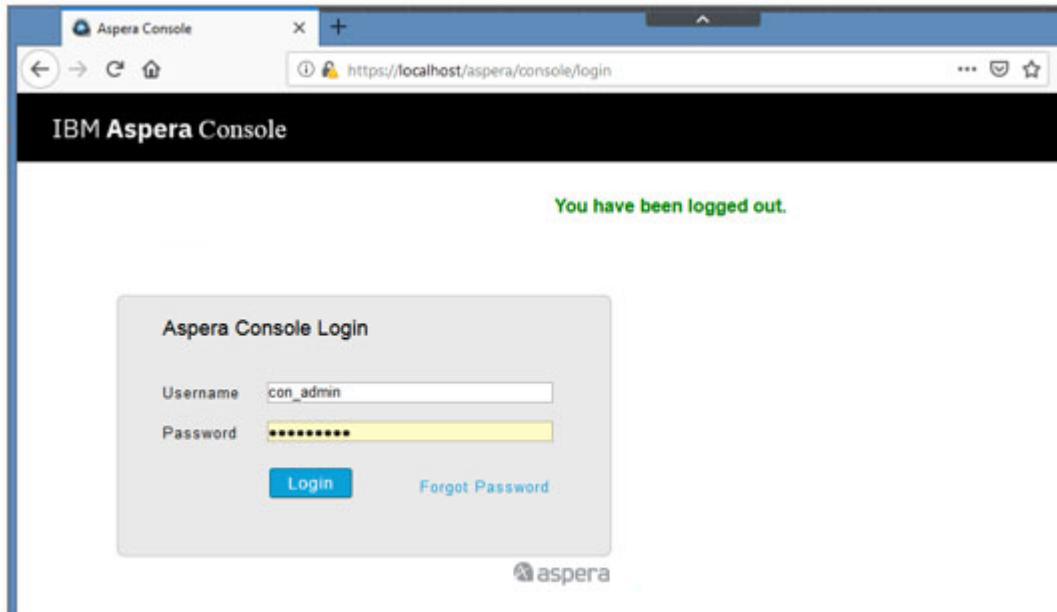


# 1.2. Initial IBM Aspera Console configuration

IBM Aspera Console is web-based and appears the same to users regardless of the operating system it is running on.

## 1.2.1. Accessing the Aspera Console application

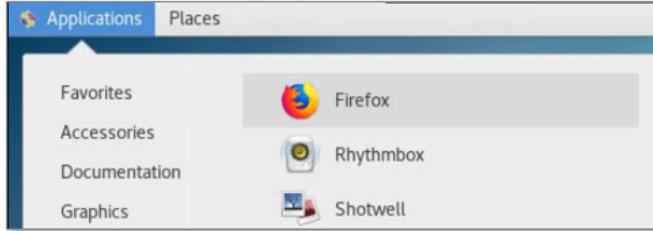
- \_\_\_ 1. Access Aspera Console from the local Windows system.
  - \_\_\_ a. Continue on the Singapore system.
  - \_\_\_ b. Sign in using these credentials:
    - Username: **con\_admin**
    - Password: **Passw0rd\_**



- \_\_\_ 2. Access Aspera Console from a remote system.

You can also access Aspera Console from other systems, assuming they were identified when you ran the **asctl console:setup** routine.

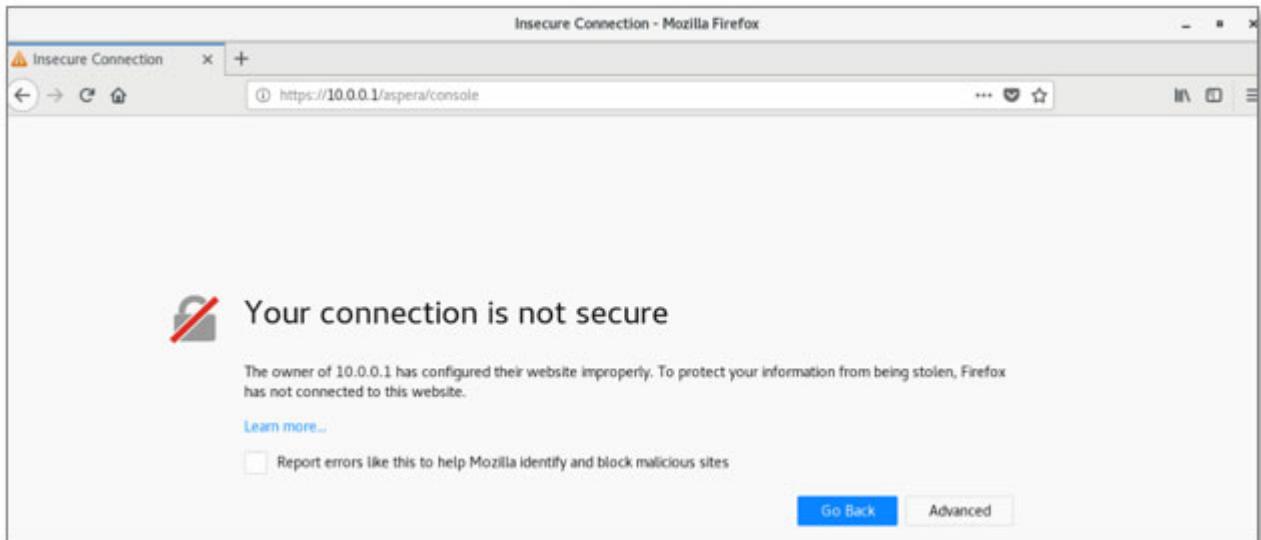
- \_\_\_ a. Switch to the London server.
- \_\_\_ b. Sign in using these credentials:
  - Username: **root**
  - Password: **passw0rd**
- \_\_\_ c. Open a web browser by clicking **Applications** and selecting **Firefox**.



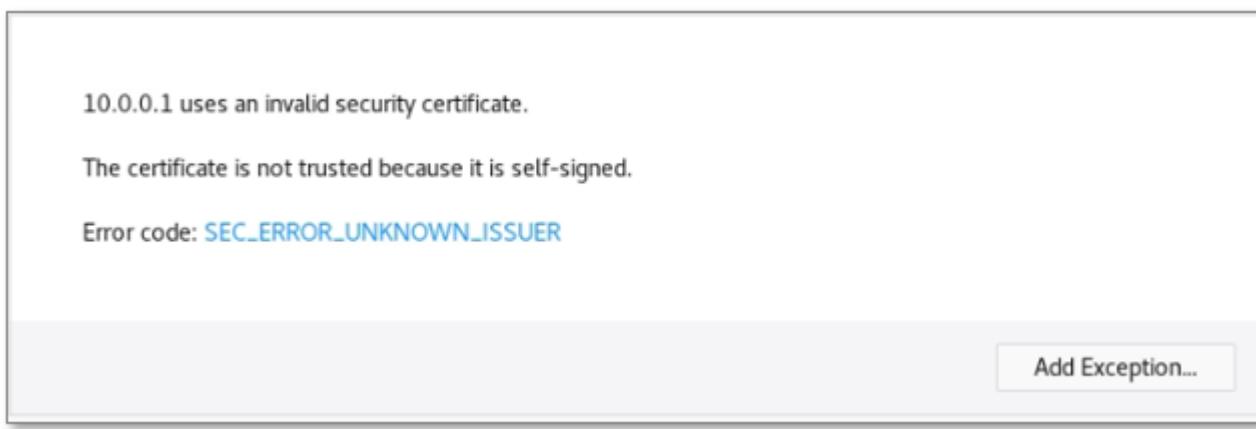
- \_\_\_ d. Enter the following URL in the address field of the browser:

**https://10.0.0.1/aspera/console**

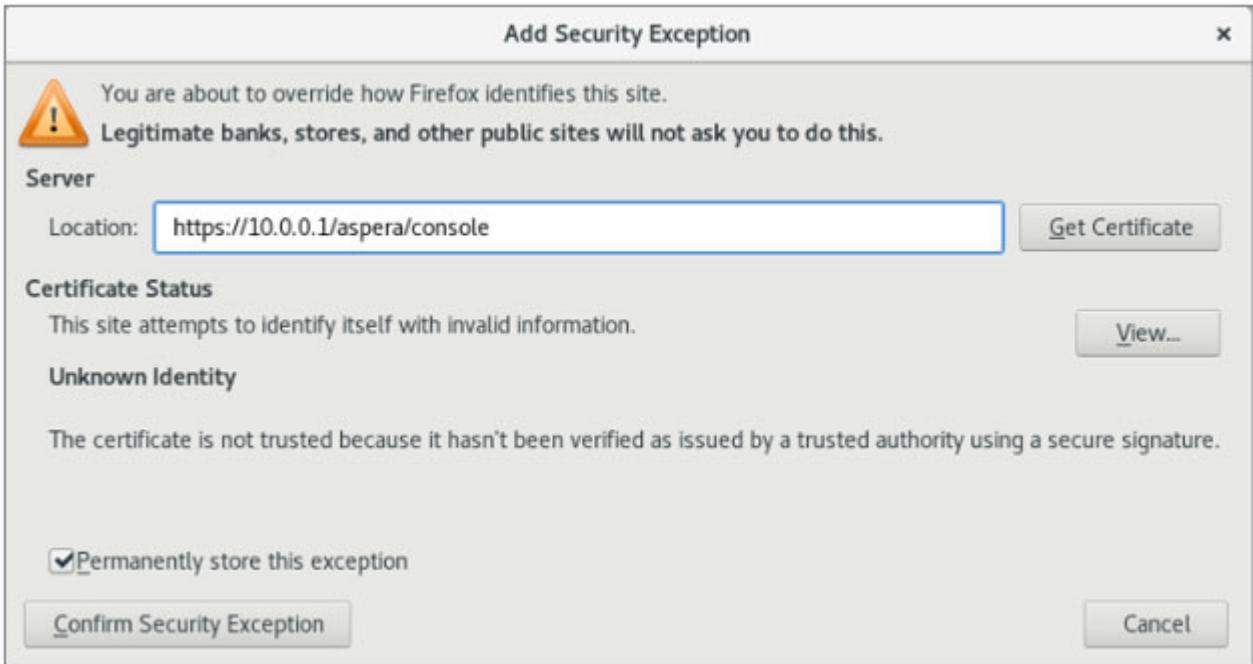
- \_\_\_ e. When prompted about security, click **Advanced**.



- \_\_\_ f. Click **Add Exception**.



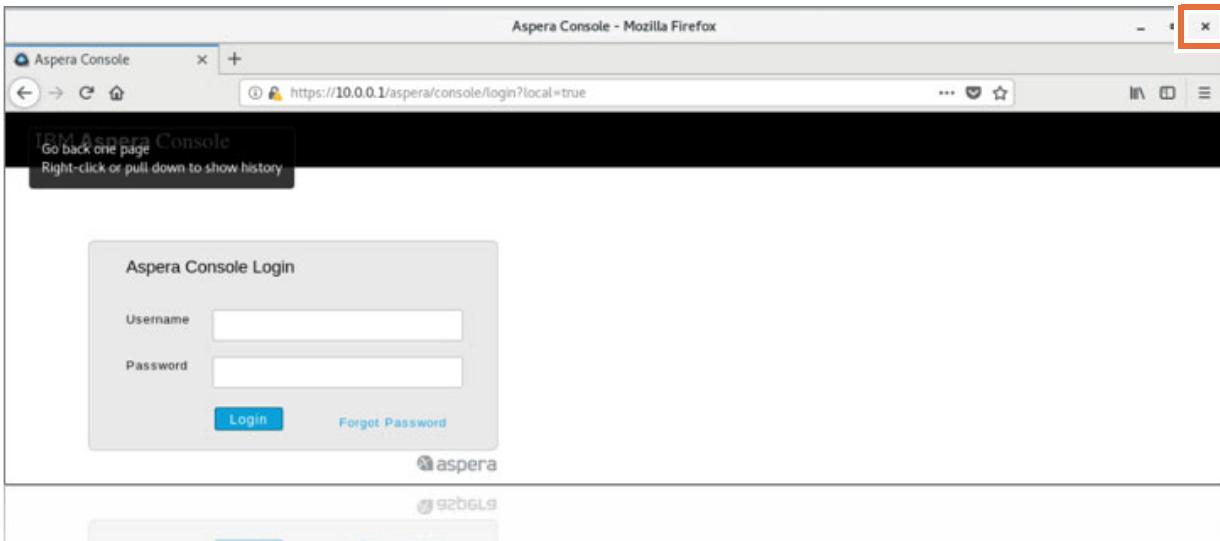
- \_\_\_ g. Click **Confirm Security Exception**.



The Aspera Console login page is displayed.

You successfully accessed Aspera Console from a remote system.

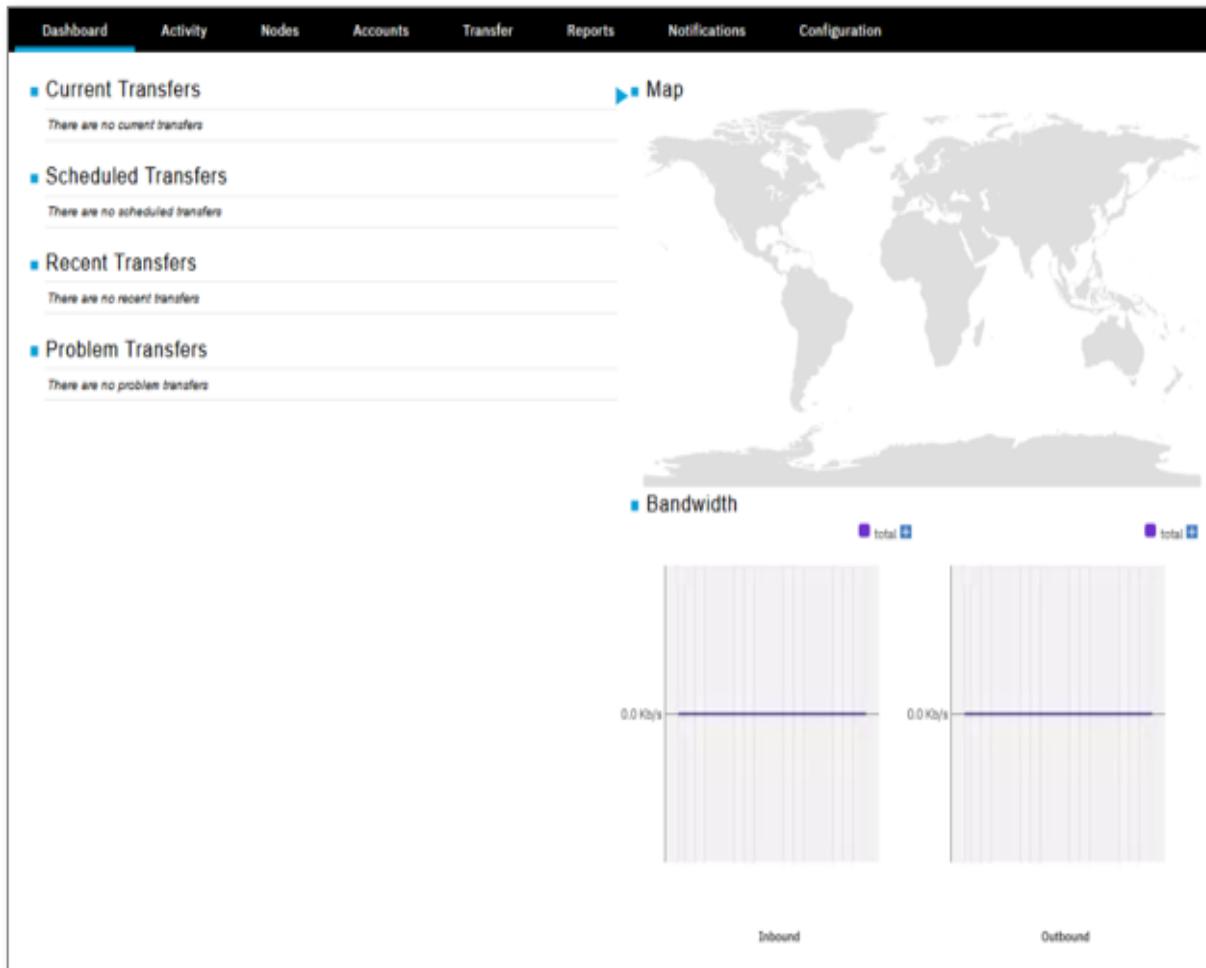
Close the Firefox browser by clicking the **x** at the upper right corner of the browser window.



## 1.2.2. Configuring email notifications

- 1. Switch to the Singapore server.

When the Aspera GUI is first started, **Dashboard** opens. **Dashboard** provides an overview of all transfer activities and the status of nodes for which you have monitoring permissions. **Dashboard** gives continuous updates and helps identify transfer and node problems.



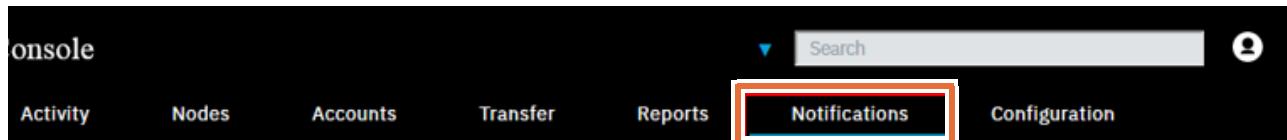
While no transfers are displayed yet, after the Aspera Console application is configured and is ready to monitor transfers, **Dashboard** provides a listing of:

- Up to 10 currently active transfers
- Up to 10 transfers that are scheduled in the Aspera Console application
- Up to 10 recent transfers
- Up to 10 transfers that encountered a problem

IBM Aspera Console needs to connect to a Simple Mail Transfer Server Protocol (SMTP) server to send email notifications. The following tasks configure an SMTP server and email templates.

\_\_ 2. Configure an email server.

\_\_ a. Click **Notifications**.



\_\_ b. Use the following values to complete the form:

Field	Value
Server	<code>smtp.gmail.com</code>
Port	<code>587</code>
Domain	<code>gmail.com</code>
Authentication	Select <code>Use TLS if available</code> Select <code>Login required</code>
User name	<code>asperatraining@gmail.com</code>
Password	<code>HeyKeepout</code>
Password confirmation	<code>HeyKeepout</code>
From address	<code>10.0.0.1</code>
From name	<code>Aspera Console</code>



#### Note

You have the option to save the values you entered without testing by clicking **Save**, or you can save the values and test connectivity to the SMTP server in a single step.

- 
- \_\_\_ c. Scroll down to the **Email Configuration Test (optional)** section.
  - \_\_\_ d. Enter a valid personal email address in the Test email address field.

\_\_ e. Click **Save settings and send test email**.

Email Server    Email Notification Options    Email Templates    Advanced Rulesets

■ Configure Email Server

Server	smtp.gmail.com
Port	587
Domain	gmail.com
Authentication type	<input checked="" type="checkbox"/> Use TLS if available <input type="radio"/> Open authentication <input checked="" type="radio"/> Login required
User name	asperatraining@gmail.com
Password	*****
Password Confirmation	*****
"From" address	10.0.0.1
"From" name	Aspera Console

**Save settings**

■ Email Configuration Test (optional)

Test email address

**Save settings and send test email**

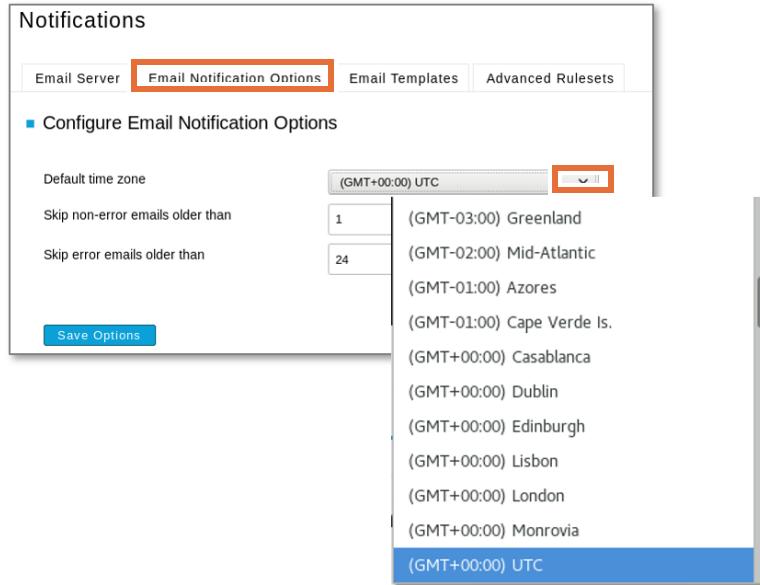
If your configuration is correct, you see something similar to the following output in the Test Results section. An email message should also be received in the account you entered for the test address.

```
Testing mail configuration...
Connection opened: smtp.gmail.com:587
-> "220 smtp.gmail.com ESMTP a3sm4734888ot1.27 - gsmtp\r\n"
<- "EHLO gmail.com\r\n"
-> "250-smtp.gmail.com at your service, [184.170.232.49]\r\n"
-> "250-SIZE 35882577\r\n"
-> "250-8BITMIME\r\n"
-> "250-STARTTLS\r\n"
-> "250-ENHANCEDSTATUSCODES\r\n"
-> "250-PIPELINING\r\n"
-> "250-CHUNKING\r\n"
-> "250-SMTPUTF8\r\n"
<- "STARTTLS\r\n"
-> "220 2.0.0 Ready to start TLS\r\n"
TLS connection started
<- "EHLO gmail.com\r\n"
-> "250-smtp.gmail.com at your service, [184.170.232.49]\r\n"
-> "250-SIZE 35882577\r\n"
-> "250-8BITMIME\r\n"
-> "250-AUTH LOGIN XOAUTH2 PLAIN-CLIENTTOKEN OAUTHBEARER XOAUTH\r\n"
-> "250-ENHANCEDSTATUSCODES\r\n"
-> "250-PIPELINING\r\n"
-> "250-CHUNKING\r\n"
-> "250-SMTPUTF8\r\n"
<- "AUTH LOGIN\r\n"
-> "334 VXNlcm5hbWU6\r\n"
<- "YXNwZXJhdHJhaW5pbmndA221haWwuY29t\r\n"
-> "334 UGFzc3dvcmQ6\r\n"
<- "SGVsb2VlclG91dA==\r\n"
-> "235 2.7.0 Accepted\r\n"
<- "MAIL FROM:<10.0.0.1>\r\n"
-> "250 2.1.0 OK a3sm4734888ot1.27 - gsmtp\r\n"
<- "RCPT TO:<asperatraining@gmail.com>\r\n"
-> "250 2.1.5 OK a3sm4734888ot1.27 - gsmtp\r\n"
<- "RCPT TO:<pfm53@usa.net>\r\n"
-> "250 2.1.5 OK a3sm4734888ot1.27 - gsmtp\r\n"
<- "DATA\r\n"
-> "354 Go ahead a3sm4734888ot1.27 - gsmtp\r\n"
writing message from String
wrote 324 bytes
-> "250 2.0.0 OK 1586202993 a3sm4734888ot1.27 - gsmtp\r\n"
<- "QUIT\r\n"
-> "221 2.0.0 closing connection a3sm4734888ot1.27 - gsmtp\r\n"
```

If the **Test Results** indicate an exception, verify the values that you entered in the configuration fields. Exception message vary, but look similar to the following:

```
Testing mail configuration...
EMAIL: EXCEPTION: 535-5.7.8 Username and Password not accepted. Learn more at
(See background process log for stack trace)
```

- f. If successful, continue to step 3.
- 3. Configure the default time zone.
  - a. Click **Email Notification Options**.
  - a. In the Default time zone field, select the value that reflects your location.
  - b. Click **Save Options**.



— 4. Customize email templates.

Aspera Console is configured with three default templates for emails that are sent when triggered by an event. Those events include transfer start, transfer success, and transfer error. You can customize each of these default templates, or create your own template to meet organizational needs. The next task modifies the default template used when errors occur during a transfer.

— a. Click **Email Templates**.

**Notifications**

- Email Server
- Email Notification Options
- Email Templates**
- Advanced Rulesets

■ Email Notification Templates

Find configured notifications by email address:  **Search**

■ Email Notifications for Transfer Start

[Create new transfer start email template](#)

NAME	DEFAULT	ACTIONS
Default Start	✓	<a href="#">edit</a>

■ Email Notifications for Transfer Success

[Create new transfer success email template](#)

NAME	DEFAULT	ACTIONS
Default Success	✓	<a href="#">edit</a>

■ Email Notifications for Transfer Error

[Create new transfer error email template](#)

NAME	DEFAULT	ACTIONS
Default Error	✓	<a href="#">edit</a>

You can edit the default templates or create a new template for each triggering event.

- b. In the **Email Notifications for Transfer Error** section, click **edit**.

■ Email Notifications for Transfer Error

[Create new transfer error email template](#)

NAME	DEFAULT	ACTIONS
Default Error	✓	<b>edit</b>

The Transfer Error E-mail Notification Template Preview: 'Default Error' page opens, indicating how default notifications appear to recipients. You can edit the template in plain text or as an HTML template.

- c. Click **Edit Plain Template**.

**Notifications**

Email Server Email Notification Options **Email Templates** Advanced Rulesets

Transfer Error E-mail Notification Template Preview: 'Default Error'

Subject: Aspera Console Transfer Notification - Error

**Edit Plain Template**

---

Aspera Console Transfer Notification

---

**TRANSFER ERROR**

Error Message: User aborted session.

Description: TEMPLATE TEST: File from Sydney to LA  
Started by: econ1 (ssh)  
Started at: 2009-03-30 13:50:03 Pacific Time (US & Canada)  
Stopped at: 2009-03-30 13:50:47 Pacific Time (US & Canada)

---

Source: Sydney (10.0.75.201)

First 5 Source Paths:  
C:/demo files/test  
C:/demo files

---

Destination: LA (10.0.85.108)

Destination Path:  
/home/econ1/uploads

**Edit HTML Template**

**Aspera Console Transfer Notification**

**TRANSFER ERROR**

Error Message:	User aborted session
Description:	TEMPLATE TEST: File from Sydney to LA
Started by:	econ1 (ssh)
Started at:	2009-03-30 13:50:03 Pacific Time (US & Canada)
Stopped at:	2009-03-30 13:50:47 Pacific Time (US & Canada)
Source:	Sydney (10.0.75.201)
First 5 Source Paths:	C:/demo files/test C:/demo files
Destination:	LA (10.0.85.108) /home/econ1/uploads
Comment:	This is a daily job
Bytes Transferred:	0 Bytes
Time to Complete:	44s
Average Rate:	

The opening section of the page identifies the variables that can be used in the template and the second part represents the HTML code that you modify.

Modify the template below to customize the content of the notification e-mail.

There are several special text strings that will be replaced in the actual e-mail by the appropriate value:

FIRST\_10\_FILEPATHS\_W\_CHECKSUMS: Paths and checksums (if available) of the first 10 files transferred  
 ALL\_FILEPATHS\_W\_CHECKSUMS: Paths and checksums (if available) of all transferred files (up to configured limit: 1000)  
 SOURCE\_FAILOVER\_GROUP: Failover group of the source node  
 FIRST\_5\_SOURCE\_PATHS: First five source paths being transferred  
 DESTINATION\_ENDPOINT: Destination endpoint of the transfer  
 EXPECTED\_TOTAL\_FILES: Total number of files at start of transfer (may be misleading for Windows push hot folders)  
 EXPECTED\_TOTAL\_BYTES: Total number of bytes at start of transfer (may be misleading for Windows push hot folders)  
 DEST\_FAILOVER\_GROUP: Failover group of the destination node  
 FIRST\_10\_FILERNAMEs: Names of the first 10 files transferred  
 FIRST\_10\_FILEPATHS: Paths of the first 10 files transferred  
 FILES\_TRANSFERRED: Number of files transferred  
 BYTES\_TRANSFERRED: Total number of bytes transferred  
 DESTINATION\_PATH: Target path on the destination node for the transfer  
 ALL\_SOURCE\_PATHS: All source paths being transferred (up to 4000 chars)  
 DESTINATION\_NODE: Destination node of the transfer  
 LAST\_SESSION\_ID: Unique ID of the most recent transfer session  
 SOURCE\_ENDPOINT: Source endpoint of the transfer  
 ALL\_FILERNAMEs: Names of all transferred files (up to configured limit: 1000)  
 FILES\_SKIPPED: Number of files skipped during transfer  
 ERROR\_MESSAGE: Error message for transfer  
 ALL\_FILEPATHS: Paths of all transferred files (up to configured limit: 1000)  
 ELAPSED\_TIME: Time elapsed for transfer  
 AVERAGE\_RATE: Average transfer rate  
 FILES\_FAILED: Number of files that failed to be transferred  
 DESCRIPTION: Description of the transfer  
 SOURCE\_NODE: Source node of the transfer  
 STOPPED\_AT: Time the transfer stopped  
 SESSION\_ID: Unique ID for most recent session started for transfer  
 STARTED\_AT: Time the transfer began  
 COMMENT: Comment for transfer  
 CONTACT: Login name of user who initiated the transfer

**WARNING:** Generating the e-mail using this template will replace your current notification e-mail.

## Recognized variables

The **Email Customization Template** defines the email's appearance.

- \_\_\_ d. Enter **IBM Aspera Console Training** in the From Name field of the template.

■ Email Customization Template

Template name	Default Error limit 25 characters
From Name	IBM Aspera Console Trainer limit 60 characters
Reply-to Address	
Subject	Aspera Console Transfer Notification - Error
Body (Plain)	<pre> Comment: COMMENT  Bytes Transferred: BYTES_TRANSFERRED Time to Complete: ELAPSED_TIME Average Rate: AVERAGE_RATE  Files Transferred: FILES_TRANSFERRED Files Skipped: FILES_SKIPPED Files Failed: FILES_FAILED  First 10 Files:  FIRST_10_FILEPATHS  You are receiving this message because your Aspera Console preferences are set to receive these notifications or someone else thought you should know about this particular transfer. </pre>

**Save**   **Cancel**

\_\_\_ e. In the Body (Plain) section, find the line that reads **Source:SOURCE\_NODE**.

Source: SOURCE_NODE
First 5 Source Paths: FIRST_5_SOURCE_PATHS
Destination: DESTINATION_NODE
Destination Path: DESTINATION_PATH
Comment: COMMENT
Bytes Transferred: BYTES_TRANSFERRED

\_\_\_ f. Add the following text on the line after the entry that reads SOURCE\_NODE.

Expected number of files:

EXPECTED\_TOTAL\_FILES

Started by:	CONTACT
Started at:	STARTED_AT
Stopped at:	STOPPED_AT
-----	
Source:	SOURCE_NODE
-----	
Expected Number of files: EXPECTED_TOTAL_FILES	
-----	
First 5 Source Paths: FIRST_5_SOURCE_PATHS	
-----	

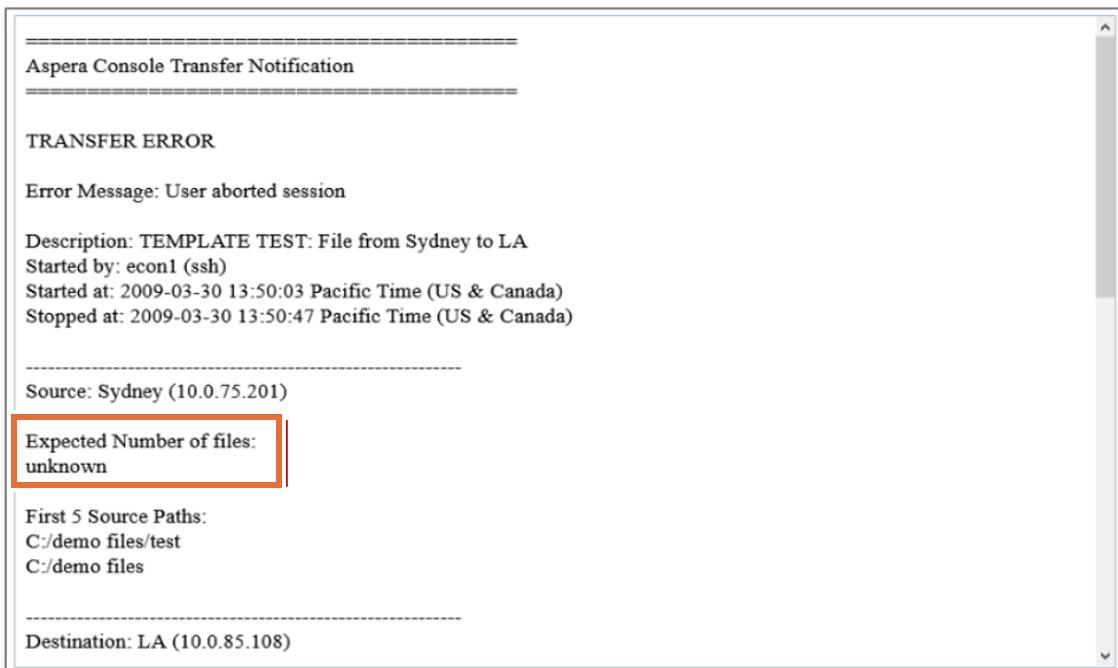
The template now includes the added text.

g. Click **Save**.

### Email Customization Template

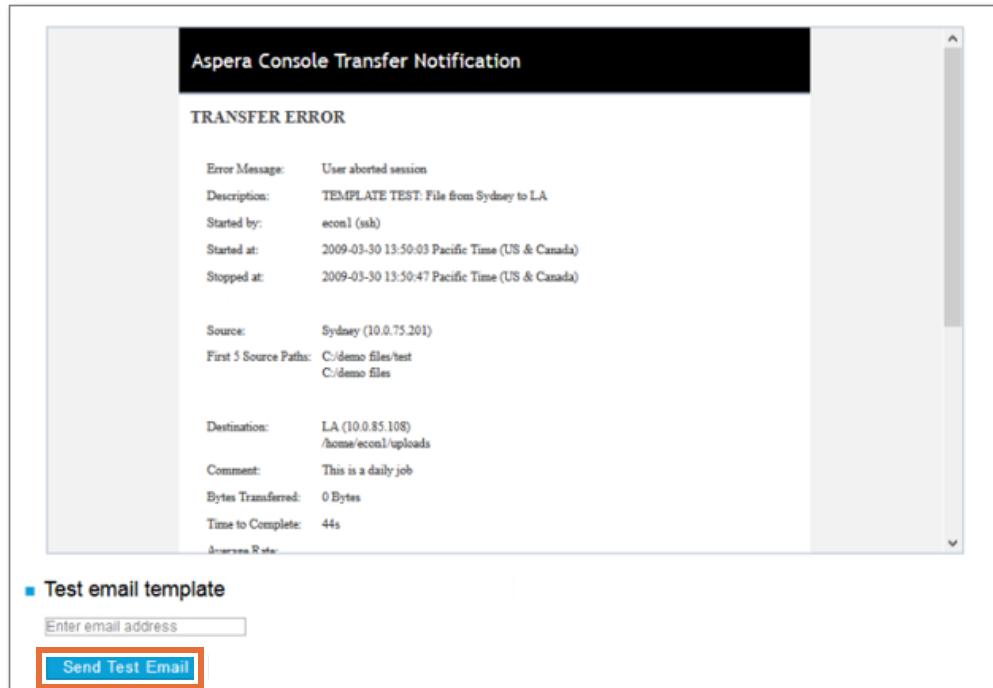
Template name	Default Error limit 25 characters
From Name	IBM Aspera Console Training limit 60 characters
Reply-to Address	
Subject	Aspera Console Transfer Notification - Error
Body (Plain)	Error Message: ERROR_MESSAGE Description: DESCRIPTION Started by: CONTACT Started at: STARTED_AT Stopped at: STOPPED_AT ----- Source: SOURCE_NODE ----- Expected Number of files: EXPECTED_TOTAL_FILES ----- First 5 Source Paths: FIRST_5_SOURCE_PATHS -----
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

Aspera Console returns to the **Transfer Error E-mail Notification Template Preview:'Default Error'** page where you see the changes.



Notice that the text you added (**Expected Number of files:**) now appears in the preview. However, the value that is reported for the number of files is **unknown**. This unknown value is reported because no actual files were transferred and the sample data file that the template uses does not contain a value for the EXPECTED\_TOTAL\_FILES variable.

- \_\_\_ h. Scroll down to the **Test email template** section.
- \_\_\_ i. Enter a valid personal email address in the Test email template field.
- \_\_\_ j. Click **Send Test Email**.



If the template is configured correctly, you see test results similar to the following output

■ Test Results

```

Sending test email...
Connection opened: smtp.gmail.com:587
<- "220 smtp.gmail.com ESMTP z12sm8422833otk.24 - gsmtp\r\n"
-> "250-smtp.gmail.com at your service, [184.170.232.51]\r\n"
-> "250-SIZE 35882577\r\n"
-> "250-8BITIMMEX\r\n"
-> "250-STARTTLS\r\n"
-> "250-ENHANCEDSTATUSCODES\r\n"
-> "250-PIPELINING\r\n"
-> "250-CHUNKING\r\n"
-> "250-SMTPUTF8\r\n"
-> "STARTTLS\r\n"
-> "220 2.0.0 Ready to start TLS\r\n"
TLS connection started
<- "EHLO gmail.com\r\n"
-> "250-smtp.gmail.com at your service, [184.170.232.51]\r\n"
-> "250-SIZE 35882577\r\n"
-> "250-8BITIMMEX\r\n"
-> "250-AUTH LOGIN PLAIN XAUTH2 PLAIN-CLIENTTOKEN OAUTHBEARER XAUTH\r\n"
-> "250-ENHANCEDSTATUSCODES\r\n"
-> "250-PIPELINING\r\n"
-> "250-CHUNKING\r\n"
-> "250-SMTPUTF8\r\n"
-> "AUTN LOGIN\r\n"
-> "334 VXNlcm5hbWU\r\n"
<- "YXNzZXJhdHJhaW5pbmduZ21haWwvY29t\r\n"
-> "334 UGFzc3dvcmQ\r\n"
-> "SGV5SS2VlG91dA==\r\n"
-> "235 2.7.0 Accepted\r\n"
-> "MAIL FROM:<10.0.0.1>\r\n"
-> "250 2.1.0 OK z12sm8422833otk.24 - gsmtp\r\n"
-> "RCPT TO:<asperatraining@gmail.com>\r\n"
-> "250 2.1.5 OK z12sm8422833otk.24 - gsmtp\r\n"
-> "RCPT TO:<pfm53@usa.net>\r\n"
-> "250 2.1.5 OK z12sm8422833otk.24 - gsmtp\r\n"
-> "DATA\r\n"
-> "354 Go ahead z12sm8422833otk.24 - gsmtp\r\n"
writing message from String
wrote 10506 bytes
-> "250 2.0.0 OK 1587173007 z12sm8422833otk.24 - gsmtp\r\n"
-> "QUIT\r\n"
-> "221 2.0.0 closing connection z12sm8422833otk.24 - gsmtp\r\n"

```

If you receive an exception, check the entries that you made to the body of the file.

- \_\_\_ k. Check the email account that you entered to see the test email.



### Note

The value **IBM Aspera Console Training** appears in the FROM field of the recipient's email client.

- 
- \_\_\_ 5. Create an advanced rule to send an email when a transfer from the 10.0.0.3 node encounters an error.

You can further customize email notifications by creating advanced rulesets. Rulesets define specific situations to trigger email notifications. For example, you want to send an email to a user named Bob when transfers with a source address of 10.0.0.3 encounter an error. The following tasks configure that ruleset.

- \_\_\_ a. Click **Advanced Rulesets**.
- \_\_\_ b. Click **Create New Ruleset**.

The screenshot shows the 'Notifications' page with the 'Advanced Rulesets' tab selected. Below the tabs, there's a section titled 'Advanced Rulesets' with a search bar labeled 'Type to filter'. A table has columns: DESCRIPTION, RECIPIENTS, ENABLED, and ACTIONS. At the bottom left of the table area is a blue button labeled 'Create New Ruleset' with a red box around it.

- \_\_\_ c. In the **Description** field, enter **Errors from 10.0.0.3**.
- \_\_\_ d. In the Rules section, click **Select Filter** and choose **Address**.

This value is a description that appears in the listing of **Advanced Rulesets**.

The screenshot shows the 'Editing Advanced Ruleset' page. It has a 'Description' field containing 'Errors from 10.0.0.3' and a checked 'Ruleset enabled' checkbox. Below this is a 'Rules' section with a table. The 'MATCH' column has a dropdown menu with 'Address' selected, highlighted with a red box. The 'ON START' and 'ON SUCCESS' columns have dropdown menus. The 'ON ERROR' column has a dropdown menu. At the bottom is a 'Create' button.

The page changes indicating that the rule matches on the **Address** and that other parameters of the rule need to be configured.

**Rules**

MATCH	SIDE	NOT	COMPARISON	VALUE
Address	<Select Side>	<input type="checkbox"/>	<Select Comparator>	
<Select Filter>				

Note: Values are case sensitive

- \_\_\_ e. Set the **SIDE** field to **Source**.
- \_\_\_ f. Set the **COPMPARISON** field to **=**
- \_\_\_ g. In the **VALUE** field, enter **10.0.0.3**

The Rules section now shows the configured values.

**Rules**

MATCH	SIDE	NOT	COMPARISON	VALUE
Address	Source	<input type="checkbox"/>	=	10.0.0.3

This graphic summarizes how the rule works to determine whether an email needs to be sent. When the source IP address is equal to 10.0.0.3, an email is sent to one or more email recipients.

- \_\_\_ h. Enter your personal email address in the **Email address** field and click **Add**.

**Recipients**

Email address		<b>Add</b>
---------------	--	------------

The rule is created and more configuration options are presented. You can use the menus for each triggering event (**On Start**, **On Success**, and **On Error**) to select when the rule applies. Selecting the **No notification** option configures the system to not send any notifications for that trigger event. Email templates define the message that is sent.

In this case, the only email templates are the default ones. So, only the options of **No notification** or the default email template (**Default Start**, **Default Success**, and **Default Error**) are available.

EMAIL ADDRESS	ON START	ON SUCCESS	ON ERROR
bob@example.com	(default) Default Start No notification (default) Default Start	(default) Default Success (default) Default Error	(default) Default Error

**Create**

- \_\_ i. Change the **ON START** and **ON SUCCESS** fields to **No notification**.
- \_\_ j. Click **Create**.

EMAIL ADDRESS	ON START	ON SUCCESS	ON ERROR
bob@example.com	No notification	No notification	(default) Default Error

The **Advanced Rulesets** page opens with a listing of all rules.

The **Advanced Rulesets** page presents options for disabling, editing, copying, or deleting each rule.

DESCRIPTION	RECIPIENTS	ENABLED	ACTIONS
Errors from 10.0.0.3	bob@example.com	✓	disable edit copy delete

**Create New Ruleset**

The rule you created appears in the Advanced Rulesets section. The RECIPIENTS value shown on the system reflects the email address you entered earlier.

### 1.2.3. Configuring Aspera Console parameters

Numerous configuration parameters can be modified to meet organizational needs by using the parameters provided on the Console Configuration pages. The following tasks require you to view

the various configuration parameters that can be modified, and change their settings. The effects of these modifications are seen in later exercises.

- 1. Click **Configuration** at the upper right of the Aspera Console interface.

The screenshot shows the Aspera Console dashboard. At the top, there is a navigation bar with tabs: Dashboard, Activity, Nodes, Accounts, Transfer, Reports, Notifications, and Configuration. The 'Configuration' tab is highlighted with a red box. Below the navigation bar, the title 'Console Configuration' is displayed. Underneath the title, there is a horizontal menu bar with several items: Defaults, Proxy, Cookies, Map, SSH Keys, Background, Database, Custom Fields, and License. The 'Database' item is also highlighted with a red box.

As previously stated, the configuration tab contains links to several pages (presented at the top of the page), for configuring aspects of Aspera Console behaviors and capabilities.

### 1.2.3.1. Configuring Aspera Console Defaults

- 1. Disable the Space Watcher warnings.
  - a. Locate the **Warn when database free space less than** parameter.
  - b. Enter the number 0 in the associated field.

The screenshot shows the 'Console Defaults' configuration page. It has two main sections: 'Console database IP address' and 'Warn when database free space less than'. The 'Console database IP address' section contains a text input field with '10.0.0.1' and a note below it: 'the address managed nodes will log to'. The 'Warn when database free space less than' section contains a text input field with '0' and a note below it: 'gigabyte(s) disable warnings'.

- 2. To avoid frequent time outs, change the settings so the system waits for 15 minutes of inactivity before logging you off.
  - a. Scroll down to the **Mark Inactive Timeout** parameter.
  - b. Change the value in the associated field to be 900 seconds.

The screenshot shows the 'Mark Inactive Timeout' configuration page. It displays a text input field with '900' and the unit 'seconds' next to it. Below the input field, there is a note: 'how long to wait before a session is marked as inactive'.

Aspera Console can retrieve the contents of directories on managed nodes. By default, the maximum number of files that can be read in a single read is 1000. Some deployments have directories that contain multiple thousands of files. Limiting the number of files in response to a query to 1000 can introduce unacceptable behavior for some environments. The File Browsing Max Items parameter can be modified to increase (or decrease) the maximum number of files in a response.

- \_\_\_ 3. Increase the maximum number of files that are returned when browsing file lists on remote nodes.
  - \_\_\_ a. Find the **File Browsing Max Items** parameter.
  - \_\_\_ b. Set the value to 2500.

File Browsing Max Items  maximum number of items to retrieve from node when browsing file lists

By default, Aspera Console is not enabled to manage Watchfolders configured on managed nodes. This configuration setting can be modified by changing the Watchfolders parameter on the **Defaults** page.

- \_\_\_ 4. Enable Watchfolder management from Aspera Console.
  - \_\_\_ a. Scroll down to the **Watchfolders** parameter.
  - \_\_\_ b. Select **Enable Watchfolder management from Console..**

Watchfolders  Enable Watchfolder management from Console  
Watchfolders are available for admin users only

Watchfolders per page  Number of watchfolders to display per page

The initial Target Rate value for Aspera Console-initiated transfers is only 10 Mbps, as defined by the Target Rate parameter found on the Defaults page. This low Target Rate can be adjusted by modifying the value that is defined in the Target Rate parameter.

- \_\_\_ 5. Set the default target rate for all Aspera Console initiated transfers to be 20 Mbps.
  - \_\_\_ a. Go to the **Transfer Defaults** section.
  - \_\_\_ b. Change the **Target Rate** parameter to 20000.

Transfer Defaults  Kbps

Target Rate  Kbps

The rules for Aspera Console passwords are designed to facilitate a reasonably secure environment. However, some deployments might require simpler password requirements, which can be configured with the Password Requirement Regular Expression parameter.

- \_\_\_ 6. Remove all rule requirements for Aspera Console passwords.
  - \_\_\_ a. Find the **Password Requirement Regular Expression** parameter and delete the regular expressions in the associated field.
  - \_\_\_ b. Delete the text in the **Password Requirement Message** field.
- \_\_\_ 7. Click **Save**.

8.

Password Requirement Regular Expression  Enter a regular expression for password requirements. Leave blank for no requirement

Password Requirement Message

**Empty sessions (successfully completed with 0 bytes transferred)**

Leave in database  
 Delete if hot folder  
 Delete all

### 1.2.3.2. Configuring a map for the dashboard

The Dashboard view can be configured to display a map that can reference where various nodes are located and indicate when transfers are active between nodes. You must configure the system to activated a map, and then you must manually position nodes on the map display. The map display uses PNG files. Aspera Console includes two default images for display on the Dashboard. One of these included images is a map of the world, and the other is graphic that lists nodes as external, internal, in the DMZ, or quarantined. If neither of these images meet your needs, you can upload your own custom map image. The following steps enable the system to display the world map feature on the Dashboard page.

- 1. Configure a world map for the Dashboard page.
  - a. Click **Map** at the top of the Console **Configuration** page.
  - a. Click **select** at the right side of the world map.

Defaults	Proxy	Cookies	Map	SSH Keys	Background	Database	Custom Fields	License												
<b>Map Images</b> <div style="float: right;"><input type="button" value="Upload Map File"/></div> <table border="1"> <thead> <tr> <th>FILENAME</th> <th>PREVIEW</th> <th>SELECTED</th> <th>ACTIONS</th> </tr> </thead> <tbody> <tr> <td>map.world.png</td> <td></td> <td><input type="button" value="select"/></td> <td><input type="button" value="delete"/></td> </tr> <tr> <td>map.zones.png</td> <td></td> <td><input type="button" value="select"/></td> <td><input type="button" value="delete"/></td> </tr> </tbody> </table>									FILENAME	PREVIEW	SELECTED	ACTIONS	map.world.png		<input type="button" value="select"/>	<input type="button" value="delete"/>	map.zones.png		<input type="button" value="select"/>	<input type="button" value="delete"/>
FILENAME	PREVIEW	SELECTED	ACTIONS																	
map.world.png		<input type="button" value="select"/>	<input type="button" value="delete"/>																	
map.zones.png		<input type="button" value="select"/>	<input type="button" value="delete"/>																	

The page changes to show the world map as the selected image.

A screenshot of a web-based application titled 'Map Images'. At the top right is a blue button labeled 'Upload Map File'. Below it is a table with two columns: 'FILENAME' and 'PREVIEW'. A single row is shown, containing 'map.world.png' and a preview image of a world map. To the right of the preview is a column with a red box around the word 'SELECTED' and a checkmark icon. At the bottom right of this column is a blue link labeled 'delete'.



The **Upload Map File** link can be used to upload a custom image for use on the Dashboard page.

- \_\_\_ b. Click **Dashboard** at the top of the page to see the results.

The world map is now shown on as a background on the Dashboard page.

You can temporarily move the map image out of the way when more space is needed on the **Dashboard** for viewing transfers.

A screenshot of the 'IBM Aspera Console' dashboard. The top navigation bar includes links for 'Dashboard' (which is highlighted with a red box), 'Activity', 'Nodes', 'Accounts', 'Transfer', 'Reports', 'Notifications', and 'Configuration'. On the left, there's a sidebar with sections for 'Current Transfers', 'Scheduled Transfers', 'Recent Transfers', and 'Problem Transfers', each stating 'There are no [type] transfers'. To the right, there's a large world map background. Overlaid on the map are several interactive elements: a blue arrow pointing to the right next to the word 'Map', a bandwidth chart with a blue arrow pointing to the word 'Bandwidth', and two small buttons labeled 'total' with a plus sign.

- \_\_\_ c. Click the blue arrow next to the name **Map** to move the map image off the page.

A screenshot of the 'IBM Aspera Console' dashboard, similar to the previous one but with the world map removed from the background. The sidebar and other dashboard elements remain the same, including the 'Map' section which now only shows the blue arrow pointing to its name.

- \_\_ d. Click the arrow at the right of the page to restore the map image.

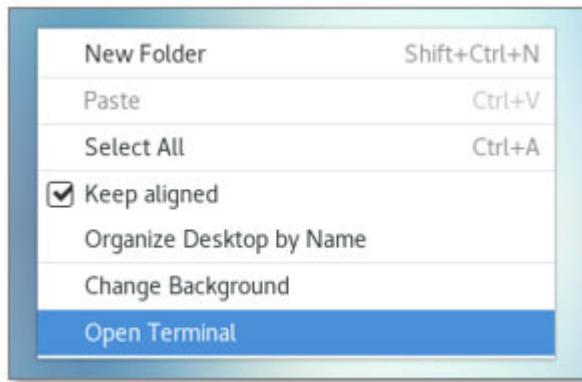
The screenshot shows the IBM Aspera Console interface. At the top right, there is a red box highlighting a blue double-headed horizontal arrow icon. Below the arrow, the interface displays two sections: "Current Transfers" and "Scheduled Transfers". Both sections contain the message "There are no current transfers" and "There are no scheduled transfers" respectively. The background of the interface is white.

Section	Description
Current Transfers	There are no current transfers
Scheduled Transfers	There are no scheduled transfers

## 1.3. Installing IBM Aspera Console on Linux systems

The process of installing IBM Aspera Console on Linux systems is similar to the process used on a Windows system. The tasks in this part of the exercise have you go through the steps for installing Aspera Console on Linux systems to familiarize yourself with the process. This last section does not have you go through the configuration of Aspera Console, just the installation. Aspera Console configuration on Linux systems is identical to the process on Windows systems.

- 1. Switch to the Denver server.
- 2. Login with the `root` and `passw0rd` credentials.
- 3. Right mouse click the desktop and select **Open Terminal**.



- 4. Run the following commands in the terminal window:

```
cd Desktop
ls
```

```
[root@denver ~]# cd Desktop
[root@denver Desktop]# ls
aspera.Console.65280.license
ibm-aspera-common-1.2.27.176566-0.x86_64.rpm
ibm-aspera-console-3.4.0.176566-0.x86_64.rpm
```

The Aspera Common software installer, Aspera Console software installer, and license file are located in the root user's Desktop directory.



### Reminder

The Common software must be installed before installing the Aspera Console software.

- 5. Install the common software by running the following rpm command in the terminal window to install the common components.

```
rpm -Uvh ibm-aspera-common-1.2.27.176566-0.x86_64.rpm
```

```
[root@denver Desktop]# rpm -Uvh ibm-aspera-common-1.2.27.176566-0.x86_64.rpm
Preparing... ################################################ [100%]
Updating / installing...
 1:aspera-common-1.2.27.176566-0      ##### [100%]
Created symlink from /etc/systemd/system/multi-user.target.wants/aspera_db_space
_watcher.service to /usr/lib/systemd/system/aspera_db_space_watcher.service.
```

- 6. After the Common software is installed, begin the Aspera Console installation by running the following command:

```
rpm -Uvh ibm-aspera-console-3.4.0.176566-0.x86_64.rpm
```

```
[root@denver Desktop]# rpm -Uvh ibm-aspera-console-3.4.0.176566-0.x86_64.rpm
Preparing... ################################################ [100%]
Updating / installing...
 1:aspera-console-3.4.0.176566-0      ##### [100%]
To complete the setup of Console, run "asctl console:setup"
```

The last line of the output indicates the need to run the `asctl console:setup` routine.

### 1.3.1. Configure initial system settings with `asctl`

- 1. Open a terminal window.
- 2. Run the following command:

```
asctl console:setup
```

Use the following values in response to the questions asked by the setup routine:

Prompt	Input Value
Streamlined or detailed setup <s/d>? <current: s>	s
Choose a login name or the new admin user:	con_admin
Enter the email address for con_admin:	con_admin@example.com
Enter the password for con_admin:	aspera
Confirm:	aspera
Please enter a new MySQL root password:	passw0rd
Confirm:	passw0rd
MySQL will need to start/restart during configuration. Continue?<y/n>	y
What hostname or IP address should Apache use to identify itself?	10.0.0.2
What IP addresses and hostnames are allowed to access Console?	localhost,10.0.0.2

```

Streamlined or detailed setup (s/d)? (current: s) s

Console
  Choose a login name for the new admin user (recommendation: don't use 'admin' or 'root'): con_admin
n
  Enter the email address for con_admin: con_admin@example.com
  Enter the password for con_admin:
    Password: *****
    Confirm: *****

MySQL
  Please enter a new MySQL root password.
    Password: *****
    Confirm: *****
  MySQL will need to start/restart during configuration. Continue (y/n)? (current: y) y

Apache
  What hostname or IP address should Apache use to identify itself (in the SSL Certificate)? 10.0.0.
2
  Key and certificate will be generated in this directory:
    /opt/aspera/common/apache/conf
  What IP addresses and hostnames are allowed to access Console? localhost,10.0.0.2,ondon,10.0.0.3,
singapore,10.0.0.1
=====
MySQL
  Enabled:      true
  Port:        4406
Apache
  Enabled:      true
  Hostname:    10.0.0.2
  Bind Address: 0.0.0.0
  HTTP Port:    80
  HTTPS Port:   443
Console
  Enabled:          true
  DB Logger IP:    10.0.0.2
  Accepted Host & IP (s): localhost,10.0.0.2,ondon,10.0.0.3,singapore,10.0.0.1
  Admin name:      con_admin
  Admin email:     con_admin@example.com
  MySQL is local:  true

Are these settings correct? (y/n/x with x for exit) y

```

- 3. If the values entered are correct, enter **y** in response to the question. If the values need to be modified, enter **n** at the prompt.

After you enter **y** to accept the settings, the routine will process your entries to update the appropriate files.

You are asked to confirm that you want to restart Apache, MySQL, and Console.

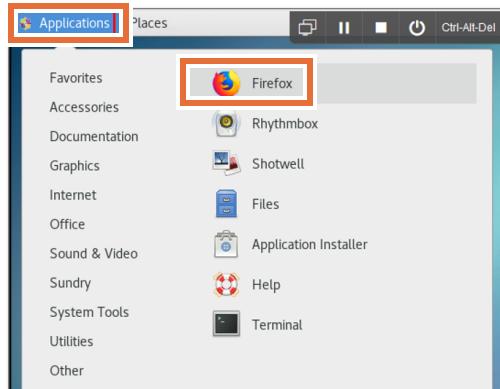
- 4. Answer **y** to each of the questions:

- Apache needs to be restarted, restart it now (y/n)? (default:y)
- MySQL needs to be restarted, restart it now (y/n)? (default:y)
- Console needs to be restarted, restart it now (y/n)? (default:y)

## 1.3.2. Installing the license key

Installing the license key for IBM Aspera Console on Linux systems is the same as installing the license key on a Windows system.

- 1. Open a browser by clicking **Applications**, then selecting **Firefox**.



The process for installing the license key on a Linux system is the same as installations on Windows systems.

- 2. Enter **localhost** in the browser's address bar.
  - 3. When prompted about security, click **Advanced**.
- Another window appears that provides the opportunity to Go Back or continue to the website.
- 4. Click **Accept the Risk and Continue**.

A screenshot of a Firefox browser window. The address bar shows the URL <https://localhost/aspera/console>. A yellow box highlights the entire content area of the browser. Inside, a warning message reads: "Warning: Potential Security Risk Ahead. Firefox detected a potential security threat and did not continue to localhost. If you visit this site, attackers could try to steal information like your passwords, emails, or credit card details." Below this, there are two buttons: "Go Back (Recommended)" and "Advanced...". A red box highlights the "Advanced..." button, and a red arrow points down to a detailed view of the certificate error. This detailed view includes the text: "Websites prove their identity via certificates. Firefox does not trust this site because it uses a certificate that is not valid for localhost.", the error code "Error code: MOZILLA\_PKIX\_ERROR\_SELF\_SIGNED\_CERT", a "View Certificate" link, and two buttons at the bottom: "Go Back (Recommended)" and "Accept the Risk and Continue".

The Aspera Console login page opens, indicating that a license is not installed.

- \_\_\_ 5. Sign in using these credentials:
  - Username: **con\_admin**
  - Password: **aspera**
- \_\_\_ 6. Click **Login**.

The screenshot shows the 'Aspera Console Login' interface. At the top, there is a red error message: 'Console license not found' and 'Only admin logins permitted until this problem is resolved.' Below this is a login form with fields for 'Username' and 'Password'. The 'Login' button is highlighted with a red box. To the right of the button is a 'Forgot Password' link. The Aspera logo is at the bottom.

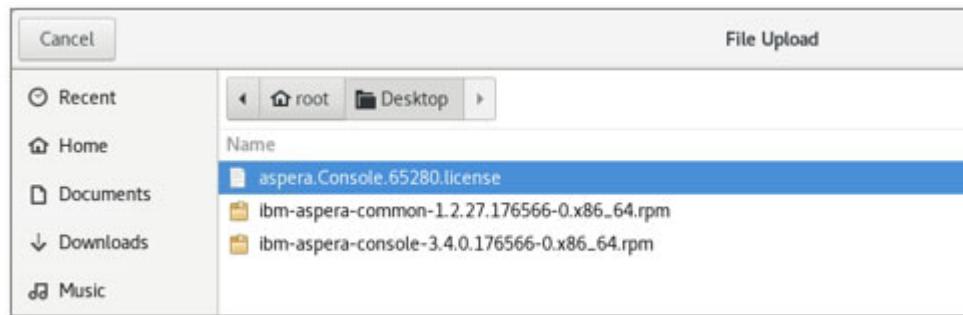
- \_\_\_ 7. Enter the following values when prompted to change the password:
  - Current Password: **aspera**
  - New Password: **Passw0rd\_**
  - Confirm New Password: **Passw0rd\_**
- \_\_\_ 8. Click **Change Password**.

The screenshot shows the 'IBM Aspera Console' dashboard with a navigation bar at the top. Below it is a message: 'Passwords must be at least six characters long, with at least one letter, one number, and one symbol'. A 'Change Password' dialog box is open. It contains fields for 'Username' (set to 'con\_admin'), 'Current Password', 'New Password', and 'Confirm New Password', all of which are masked with dots. A 'Change Password' button is at the bottom, also highlighted with a red box. The Aspera logo is at the bottom of the dialog.

- \_\_\_ 9. Click **Upload a license file**.



- 10. Navigate to the Desktop and double-click `aspera.Console.6580.license`.



- 11. When the screen changes and you see the message License updated successfully, click **Save**.

**Console Configuration**

License updated successfully.

Defaults	Proxy	Cookies	Map	SSH Keys	Background	Database	Custom Fields	License
----------	-------	---------	-----	----------	------------	----------	---------------	---------

**License**

**Console License**

```
<ASPERA_LICENSE>
<DETAILS>
    expiration_date="2020-06-30"
    customer_name="aspera_eval"
    contract_number="eval-2019-q2"
    product_name="console"
    version_number="2.x"
    max_active_users="100000000"
    max_managed_nodes="10"
    transfers_enabled="yes"
    license_uuid="0fe92bd0-54cd-0137-790c-0242ac110005"/>
<KEY>
M+K39UXpbh4rEQPkHK2riuDr0Sizd1TmABaC5740a8nCGRMx7Cd+Cb2XNnc3
x1NxPeDleovnKuDGfNI2rIogTIN+gxTXX9iZV/bh6rgm44cLRFbLwRKCod4
Xo0TSJCNB85/VlVMaId1C68zSYDbHcy5h1qrRH1g191jnxAxQRCb3eGgbETN
yJ6+YMuS9LYiv+AQQjR1lychlgMNjEmrChClrn7xM2b85Vm+7MPvUd77Ns
HFew8Puwm7z1leazvCVjLSh3r+JqtivVt02phm9QhCwQNUbZBY1aXbFJPnf
ENK/cgGDC/YM73ciVDMYkvvm7at9w4igZPOjeKwQn=-
</KEY>
</ASPERA_LICENSE>
```

**Save**

The purpose of these previous steps is to acquaint you with the installation process on a Linux system. You do not use this copy of Aspera Console, so no further configuration is needed.

## End of exercise

## Exercise review and wrap-up

The tasks in this exercise demonstrate installing the IBM Aspera Console software on both Windows and Linux servers.

You configured an SMTP server, modified the email template for transfer starts, and created a custom rule to send an email notice when transfers from a specific IP address were detected.

You accessed the IBM Aspera Console application from a local server and from a remote system.

You modified configuration parameters on the Defaults page to:

- \* Disable the Aspera Space Watcher
- \* Change the login timeout 5 - 15 minutes
- \* Increase the number of files allowed during browsing of nodes
- \* Enable Watchfolder management
- \* Increase the default Target Rate for Aspera Console-initiated transfers
- \* Remove the default password security rule
- \* Add an image to the Dashboard

---

# Exercise 2. Adding and configuring Console nodes

## Estimated time

00:45

## Overview

The tasks in this step you through the preparation of Windows and Linux nodes for management by Console. After you prepare the nodes, you add and configure one Windows node and two Linux servers.

## Objectives

After completing this exercise, you should be able to:

- Prepare Aspera Transfer Servers as nodes for IBM Aspera Console
- Distinguish between managed and unmanaged nodes
- Add managed and unmanaged nodes to the Console environment
- Use Aspera Console to modify node configuration parameters
- Define endpoints for both managed and unmanaged nodes

## Introduction

The first tasks in this step you through the preparation of Windows and Linux nodes for management by Console. After you prepare the nodes, you will add and configure one Windows node and two Linux servers.

## Requirements

The exercise requires the use of all three servers in the lab environment.

## 2.4. Preparing Nodes for Aspera Console

Console uses SSH and Aspera Node API to interact with managed Aspera nodes. So, you must configure every Aspera Transfer server that is managed by Aspera Console to support the required services. In this exercise, you prepare a Windows and two Linux systems as Console nodes.

A node is any server that runs IBM Aspera High-Speed Transfer Server. Aspera web applications, such as IBM Aspera Console, communicate with a node through the IBM Aspera Node API. Console uses SSH to authenticate to the node to remotely configure nodes and uses the Node API to start and monitor transfers between nodes. Different nodes can use different Node API username and password pairs.

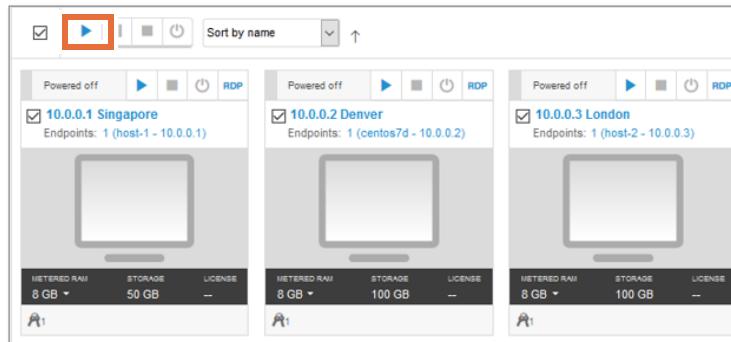
IBM Aspera High-Speed Transfer Server is running on each server, and each has a transfer user account of `xfer` configured.



### Reminder

Confirm that the lab servers are powered and active.

If the virtual machines are powered off or suspended, start them by clicking the **Run VMs** button at the top of the opening page to power all three servers.



### 2.4.1. Prepare the Denver system

- \_\_\_ 1. Continue on the Denver system.
- \_\_\_ 2. If you need to log in, use these credentials:
  - Username: `root`
  - Password: `passw0rd`

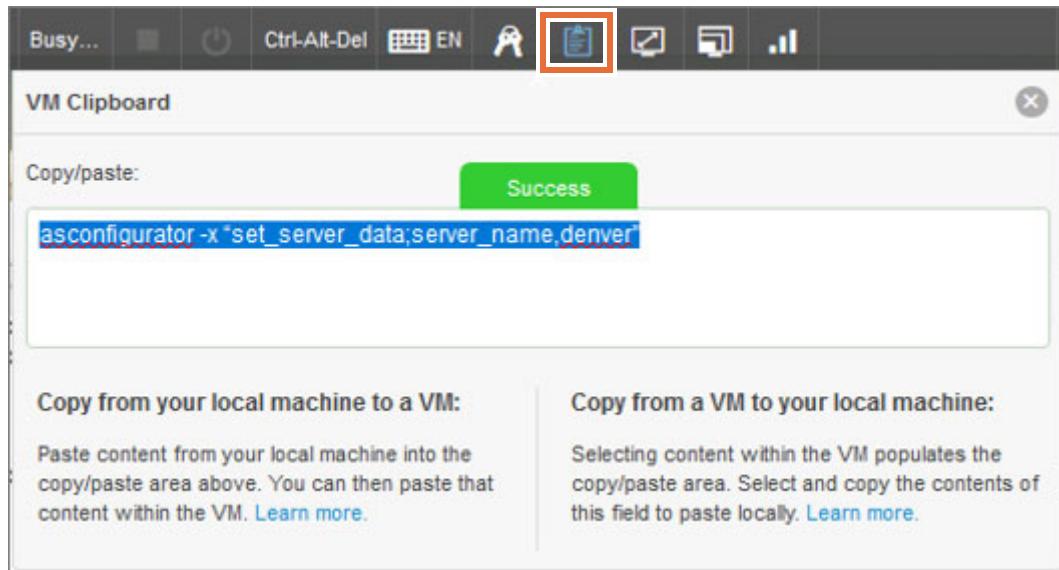
**Important**

Pasting text from the Exercise Guide to a command line on one of the lab servers does not always work as planned. Quotation marks are not always recognized properly. However, if you do not want to enter the text manually, there is a solution.

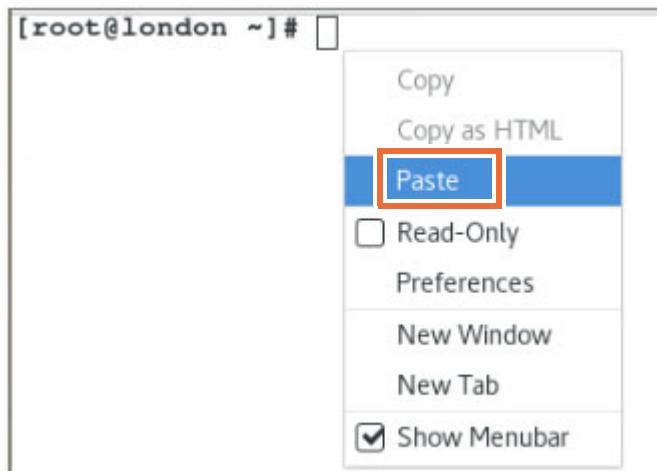
You can copy the following command and paste it into the Denver terminal by using the following actions:

- 1) Copy the text with the **CTL C (ALT C if using a Mac)** command.
- 2) Click the **Clipboard** icon.
- 3) Use the **CTL V** command or right click and select **Paste** from the menu to paste the text into the Clipboard.

You see a **Success** message and the text you want to paste before the window closes.



- 4) Place the cursor in the command line where you want to run the command.
- 5) Right mouse click and select **Paste** from the menu.



The text is copied to the command line.

```
File Edit View Search Terminal Help
[root@london ~]# asconfigurator -x "set_server_data;server_name,denver"
```

The text appears ready to run, but running it typically generates an error (as indicated in the example).

```
[root@london ~]# asconfigurator -x "set_server_data;server_name,denver"
failure
Unexpected Parameter: Unknown command: "set_server_data"

bash: server_name,denver": command not found...
```

- 6) Before running the command, change the double quotation marks surrounding the **set\_server\_data;server\_name,denver** text to single quotation marks and click **Return**.

**asconfigurator -x 'set\_server\_data;server\_name,denver'**

```
[root@denver ~]# asconfigurator -x 'set_server_data;server_name,denver'
success
```

This solution works for any commands with quotation marks that you want to copy and paste to a lab server command line.

- \_\_\_ 3. Open a terminal window and run the following command:

**asconfigurator -x "set\_server\_data;server\_name,denver"**

```
[root@denver Desktop]# asconfigurator -x "set_server_data;server_name,denver"
success
```

- \_\_\_ 4. Create a Node API user account with impersonation and admin acl settings for use with Console.

- \_\_\_ a. Run the following commands:

**cd /opt/aspera/bin**

**./asnodedadmin -a -u node\_admin -p passw0rd -x xfer --acl-set "impersonation,admin"**

- \_\_\_ b. Run the following command to confirm that the account was created.

**./asnodedadmin -l**

List of node user(s):	user	system/transfer user	acls
=====	=====	=====	=====
	node_admin	xfer	[admin, impersonation]

The Denver system is ready to be added as a node to Console.

## 2.4.2. Prepare the London system

- \_\_\_ 1. Switch to the London server.

- \_\_\_ 2. Log in using these credentials:
  - Username: **root**
  - Password: **passw0rd**
- \_\_\_ 3. Update the **aspera.conf** file to support the required services.
  - \_\_\_ a. Open a terminal window and run the following command:  
**asconfigurator -x "set\_server\_data;server\_name,server\_name,server\_name,server\_name"**  

**[root@london ~]# asconfigurator -x "set\_server\_data;server\_name,server\_name,server\_name,server\_name"**  
**success**
- \_\_\_ 4. Create a Node API user account with **impersonation** and **admin** acl settings for use with Console.
  - \_\_\_ a. Run the following commands:  
**cd /opt/aspera/bin**  
 The following command is entered on a single line.  
**./asnodedadmin -a -u node\_admin -p passw0rd -x xfer --acl-set "impersonation,admin"**
  - \_\_\_ b. Confirm that the account was created by running the following command  
**./asnodedadmin -l**  

**List of node user(s):**  

user	system/transfer user	acls
node_admin	xfer	[impersonation,admin]

The London system is ready to be added as a node to Console.

## 2.5. Add nodes to Console

The previous step configured each Aspera Transfer Server to support a Node API connection with Console. The next step is to inform Console about each node. You add the two Linux servers as managed nodes and the Windows server as an unmanaged node.

A node can be a managed node or an unmanaged node.

- Managed node: Console can initiate transfers with this node, monitor this node's activity, and configure settings for this node.
- Unmanaged node: Console cannot initiate transfers with this node or configure its settings. Console can monitor transfers only between this node and managed nodes.

### 2.5.1. Add the Denver server as a managed node

- 1. Switch to the Singapore server.
- 2. If necessary, open a browser window and enter `localhost` in the address URL field.
- 3. Sign on using the following credentials:
  - Username: `con_admin`
  - Password: `Passw0rd_`
- 4. Click **Nodes**.
- 5. Click **New Managed Node**.

ADDRESS	NAME	SSH PORT	NODE API PORT	HOSTNAME	SESSIONS	STATUS	OS	LAST RESTART	FAILOVER GROUP	ACTIONS

- 6. Configure the basic node data with the following data:
  - IP Address: `10.0.0.2`
  - Name: `Denver`
  - SSH Port: `3001`
  - Default endpoint type: `Node API`
  - Select **Create default Console groups**
- 7. Click **Create**.

**Creating New Node**

IP Address	<input type="text" value="10.0.0.2"/> <small>cannot be a domain name</small>
Name	<input type="text" value="Derver"/> <small>more than 10 characters</small>

---

**Communication**

SSH Port	<input type="text" value="33001"/>
SSH Encryption	<input type="text" value="AES256-ctr"/>
Node API Port	<input type="text" value="9092"/> <small>Default: 9091 for http, 9092 for https</small>
<input checked="" type="checkbox"/> Use HTTPS to connect to node (recommended) <input type="checkbox"/> Require signed SSL certificate	
Default endpoint type	<input type="text" value="Node API"/>

---

**Failover**

<input type="checkbox"/> Enable failover and load balancing for Console-initiated transfers on this node <small>All nodes with the same failover group name must have the same user accounts and docroot paths</small>
Failover Group Name <input type="text" value="(none)"/>

---

**Other**

<input checked="" type="checkbox"/> Create default Console groups
---

**Create**

The data is saved and the **Credentials** page opens.

The tabs across the top of the page lead to pages for performing numerous tasks associated with the node. You use these pages in later exercises.

8. Configure credentials to access the node with the following credentials:
  - SSH Username: **root**
  - SSH Password: **passw0rd**
  - Node API Username: **node\_admin**
  - Node API Password: **passw0rd**
9. Click **Update**.

**Node Maintenance**

Denver (10.0.0.2)

**Node successfully created.**

**Admin Credentials**

SSH (optional)  
required for node configuration

Username: root  
 Use SSH Key  
SSH Key: No SSH keys are configured.  
Go to Configuration > SSH Keys to create some.

Password:

Node API

Username: node\_admin  
Password:

**Update**

If you experience a problem, a message that identifies the problem appears at the top of the page.

**Node Maintenance**

Denver (10.0.0.2)

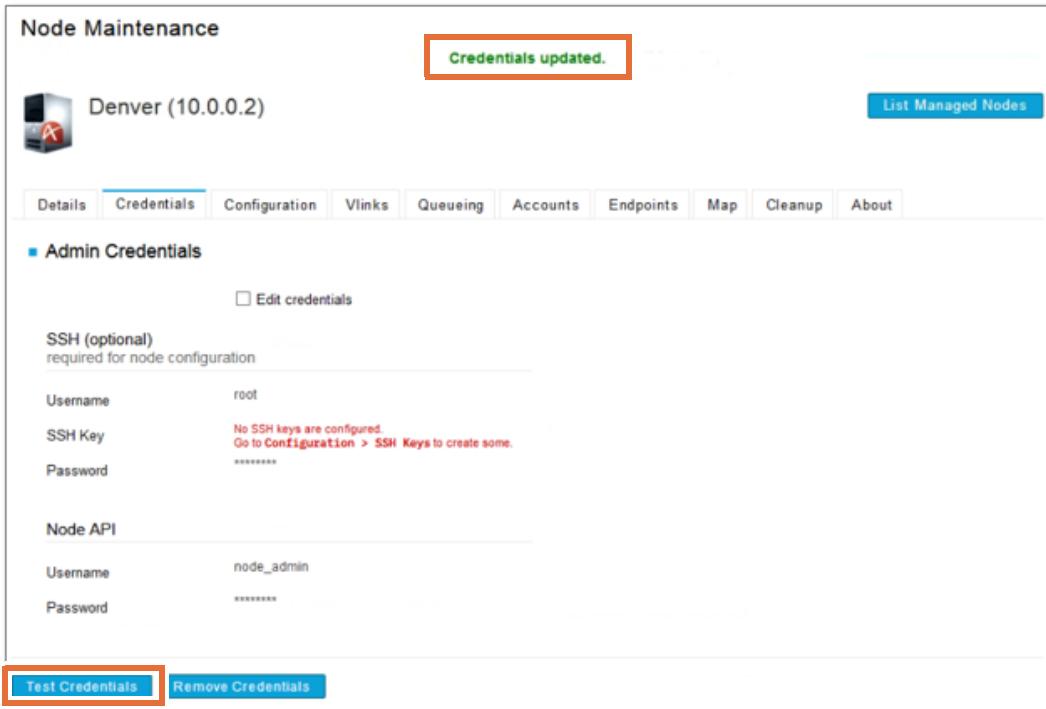
**1 error prohibited this node from being saved**

There were problems with the following fields:  
Failed to connect via Node API: Bad login or password

The example that is shown reports an error with a **Failed to connect via Node API. Bad login or password** message. This message guides you in resolving the problem. The problem in the example is a Node API problem, which is either a bad password that is entered in the Node API Password field or the Node Credential page, or a problem with the node\_admin configuration on the Denver server.

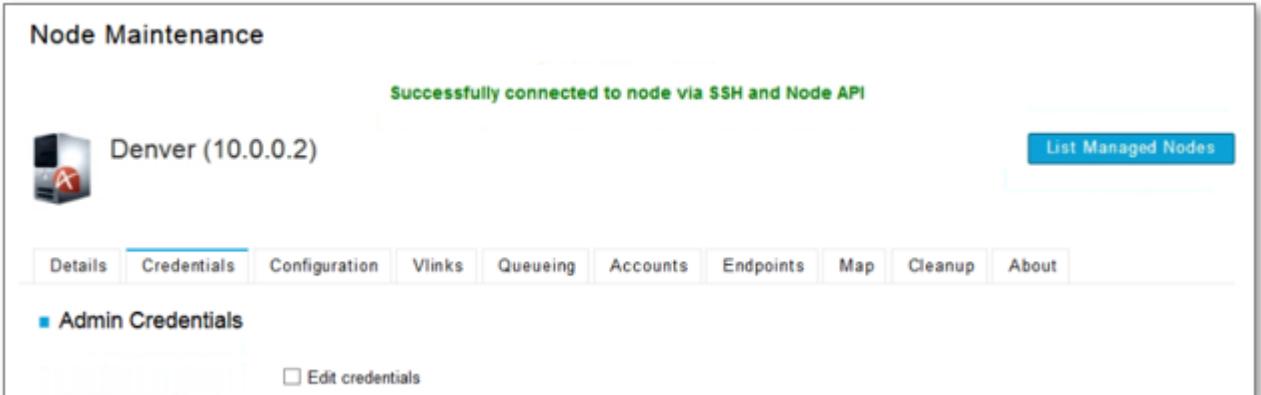
If the values are entered correctly, the Admin Credentials page opens with a message of Credentials updated and buttons at the bottom to Test Credentials and Remove Credentials.

**10. Click **Test Credentials**.**



The screenshot shows the Node Maintenance interface for a node named "Denver (10.0.0.2)". The "Credentials" tab is selected. A green message box at the top right says "Credentials updated.". Below it, under "Admin Credentials", there are fields for "Username" (root), "SSH Key" (disabled with note: "No SSH keys are configured. Go to Configuration > SSH Keys to create some."), and "Password" (\*\*\*\*\*). Under "Node API", there are fields for "Username" (node\_admin) and "Password" (\*\*\*\*\*). At the bottom, two buttons are shown: "Test Credentials" (highlighted with a red box) and "Remove Credentials".

- 11. If the test is successful, a message appears at the top of the page that indicates both the SSH and Node API connections are successful.**



The screenshot shows the Node Maintenance interface for the same node. A green message box at the top right says "Successfully connected to node via SSH and Node API". The rest of the page is identical to the previous screenshot, showing the Admin Credentials section with the "Test Credentials" button highlighted by a red box.



## Troubleshooting

If a problem is encountered during the credentials test, a message is presented at the top of the page that describes the problem that needs to be resolved. If you do encounter a credentials error, instructions are provided to give you an idea of how to proceed. Do not perform the following steps as part of the exercise unless you encounter the same problem.

The example that is shown indicates a problem with the ACL setting for the node\_admin account on the Denver node. Resolving this problem requires the following actions:

- 1) Go to the Denver system.
- 2) Modify the node\_admin account with the appropriate --acl-set "impersonation,admin" values by running the following commands (each command is a single command line):

```
/opt/aspera/bin/asnodeadmin -m -u node_admin --acl-set
"impersonation,admin"
./asnodeadmin -l
```

List of node user(s):		
user	system/transfer user	acls
node_admin	xfer	[admin, impersonation]

- 3) After resolving the problem on the remote node, **switch to the Singapore server**.
- 4) Enter **passw0rd** in the SSH Password field.
- 5) Enter **passw0rd** in the Node API Password field.
- 6) Click **Update**.

Node Maintenance

Denver (10.0.0.2)

1 error prohibited this node from being saved

Failed to connect via Node API: Node user impersonation ACL not set on node

**Admin Credentials**

Edit credentials

SSH (optional)  
required for node configuration

Username: root

SSH Key:  
No SSH keys are configured.  
Go to Configuration > SSH Keys to create some.

Password:  (red box)

Node API

Username: node\_admin

Password:  (red box)

**Update** (red box)

- 7) Repeat problem resolution tasks until the credentials update successfully.
- 8) After you see the Credentials updated message, click **Test Credentials** to confirm that the credentials are functional.

Node Maintenance

Credentials updated.

Denver (10.0.0.2)

Details Credentials Configuration Vlinks Queueing Accounts Endpoints Map Cleanup About

**Admin Credentials**

Edit credentials

SSH (optional)  
required for node configuration

Username: root

SSH Key:  
No SSH keys are configured.  
Go to Configuration > SSH Keys to create some.

Password:

Node API

Username: node\_admin

Password:

**Test Credentials** (red box) **Remove Credentials**

- 9) You see a message that Console **Successfully connected to node via SSH and Node API**.

10) The node\_admin account problem is resolved.

The screenshot shows the Node Maintenance interface for the Denver node (10.0.0.2). At the top, a green message says "Successfully connected to node via SSH and Node API". Below it, there's a node icon labeled "Denver (10.0.0.2)". A red box highlights the "List Managed Nodes" button in the top right corner. A navigation bar below the node name includes tabs for Details, Credentials (which is selected), Configuration, Vlinks, Queueing, Accounts, Endpoints, Map, Cleanup, and About. Under the "Admin Credentials" section, there's a link to "Edit credentials".

The next steps assume that Step 11 (before the Troubleshooting section) indicated success when testing the credentials for the Denver node. The next graphic is a repeat of the last graphic in the Troubleshooting section.

12. Click **List Managed Nodes** to return to the Managed Nodes page.

This screenshot is identical to the one above, showing the Node Maintenance interface for the Denver node. The "List Managed Nodes" button is again highlighted with a red box. The rest of the interface, including the navigation bar and the Admin Credentials section, remains the same.

The Denver node is listed.

Notice that the listing for the node includes an **edit** action item that facilitates editing the details of the node. You use this feature in a later lab exercise.

The screenshot shows the Managed Nodes interface. At the top, there's a search bar labeled "Type to filter nodes" and three buttons: "New Managed Node", "New Managed Cluster", and "List Unmanaged Nodes". Below is a table with columns: ADDRESS, NAME, SSH PORT, NODE API PORT, HOSTNAME, SESSIONS, STATUS, OS, LAST RESTART, FAILOVER GROUP, and ACTIONS. A single row is shown for the Denver node (10.0.0.2). The "edit" link in the ACTIONS column is highlighted with a red box. At the bottom of the table, there's a copyright notice: "© Copyright IBM Corp. 2008, 2020 (v3.4.0.176566)".

ADDRESS	NAME	SSH PORT	NODE API PORT	HOSTNAME	SESSIONS	STATUS	OS	LAST RESTART	FAILOVER GROUP	ACTIONS
10.0.0.2	Denver	33001	9092	denver	0	Active	Linux	8:10am		<a href="#">edit</a> <a href="#">delete</a>

## 2.5.2. Add the London server as a managed node

- 1. Click **New Managed Node**.
- 2. Configure the basic node data with the following data:
  - IP Address: **10.0.0.3**
  - Name: **London**
  - SSH Port: **3001**
  - Default endpoint type: **Node API**
  - Select **Create default Console groups**
- 3. Click **Create**.

**Creating New Node**

IP Address	<input type="text" value="10.0.0.3"/>	domain name
Name	<input type="text" value="London"/>	adres
<b>Communication</b>		
SSH Port	<input type="text" value="3001"/>	
SSH Encryption	AES256-ctr	
Node API Port	<input type="text" value="9092"/>	Default: 9091 for http, 9092 for https
<input checked="" type="checkbox"/> Use HTTPS to connect to node (recommended) <input type="checkbox"/> Require signed SSL certificate		
Default endpoint type	Node API	
<b>Failover</b>		
<input type="checkbox"/> Enable failover and load balancing for Console-initiated transfers on this node <small>All nodes with the same failover group name must have the same user accounts and docroot paths</small>		
Failover Group Name	(none)	
<b>Other</b>		
<input checked="" type="checkbox"/> Create default Console groups		
<input type="button" value="Create"/>		

- 4. Enter the following credentials in the appropriate fields:
  - SSH Username: **root**
  - SSH Password field: **passw0rd**
  - Node API Username: **node\_admin**
  - Node API Password: **passw0rd**
- 5. Click **Update**.

**Node Maintenance**

Node successfully created.

 London (10.0.0.3) List Managed Nodes

[Details](#) [Credentials](#) [Configuration](#) [Vlinks](#) [Queueing](#) [Accounts](#) [Endpoints](#) [Map](#) [Cleanup](#) [About](#)

■ Admin Credentials

[Edit credentials](#)

SSH (optional)  
required for node configuration

Username:

Use SSH Key  
No SSH keys are configured.  
Go to Configuration > SSH Keys to create some.

SSH Key:

Password:

Node API

Username:

Password:

Update

You see a message that the credentials are updated.

— 6. Click **Test Credentials**.

**Node Maintenance**

Credentials updated.

 London (10.0.0.3) List Managed Nodes

Details Credentials Configuration Vlinks Queueing Accounts Endpoints Map Cleanup About

■ Admin Credentials

Edit credentials

SSH (optional)  
required for node configuration

Username	root
SSH Key	No SSH keys are configured. Go to Configuration > SSH Keys to create some.
Password	*****

Node API

Username	node_admin
Password	*****

Test Credentials Remove Credentials



## Troubleshooting

If the connections are not successful, read the error message and check the appropriate area (Node API-related issues or SSH-related issues) to resolve the problem. After correcting the problem, return to Console and retest the connections.

You see a message that Console successfully connected to node via SSH and Node API.

7. Click **List Managed Nodes**.

**Node Maintenance**

Successfully connected to node via SSH and Node API

 London (10.0.0.3) List Managed Nodes

Details Credentials Configuration Vlinks Queueing Accounts Endpoints Map Cleanup About

■ Admin Credentials

The list now shows both the Denver and London nodes.

8. Click **List Unmanaged Nodes**.

The screenshot shows a table titled "Managed Nodes". The columns are: ADDRESS, NAME, SSH PORT, NODE API PORT, HOSTNAME, SESSIONS, STATUS, OS, LAST RESTART, FAILOVER GROUP, and ACTIONS. Two rows are present: one for "Denver" (ADDRESS 10.0.0.2) and one for "London" (ADDRESS 10.0.0.3). The "Actions" column for each row contains "edit" and "delete" links. A red box highlights the "List Unmanaged Nodes" button at the top right of the table header.

Managed Nodes										
<input type="text" value="Type to filter nodes"/> <a href="#">New Managed Node</a> <a href="#">New Managed Cluster</a> <a href="#" style="border: 2px solid red; padding: 2px;">List Unmanaged Nodes</a>										
ADDRESS	NAME	SSH PORT	NODE API PORT	HOSTNAME	SESSIONS	STATUS	OS	LAST RESTART	FAILOVER GROUP	ACTIONS
10.0.0.2	Denver	33001	9092	denver	0	Active	Linux	8:10am		<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3	London	33001	9092	london	0	Active	Linux	1:56pm 31-Mar		<a href="#">edit</a> <a href="#">delete</a>

## 2.5.3. Add the Singapore server as an unmanaged node

Unmanaged nodes are Aspera Transfer Server systems that are involved in transfers with one or more managed nodes, but not managed by Console. Unmanaged nodes must be defined within Console, but much less information is required for adding them.

1. Click **New Unmanaged Node**.

The screenshot shows a table titled "Unmanaged Nodes". The columns are: ADDRESS, NAME, PORT, and ACTIONS. There are no entries in the table. A red box highlights the "New Unmanaged Node" button at the top right of the table header.

Unmanaged Nodes			
<input type="text" value="Type to filter nodes"/> <a href="#" style="border: 2px solid red; padding: 2px;">New Unmanaged Node</a> <a href="#">List Managed Nodes</a>			
ADDRESS	NAME	PORT	ACTIONS

2. Configure basic node data by entering the following data into the appropriate fields:

- IP Address: **10.0.0.1**
- Name: **Acme**
- Default endpoint type: **SSH**
- Leave the SSH Port value as **22**
- Leave the SSH Encryption value as **AES256-ctr**

3. Click **Create**.

The screenshot shows a form titled "New Unmanaged Node". It has a section titled "Creating New Unmanaged Node" with the following fields:
 

- Address:
- Name:   
limit 100 characters
- Default endpoint type:
- SSH Port:
- SSH Encryption:

 At the bottom left is a red box around the "Create" button.

You see the message Unmanaged Node successfully created.

Notice the fewer number of tabs provided for unmanaged nodes as compared with managed nodes. Also, the amount of data that is required to configure an unmanaged node is much less than the data required for managed nodes.

4. Click List Unmanaged Nodes.

The screenshot shows the 'Unmanaged Nodes' configuration page. At the top, there is a success message: 'Unmanaged Node successfully created.' Below it, the node is listed with the name 'Acme (10.0.0.1)' and a small icon. A red box highlights the 'List Unmanaged Nodes' button in the top right corner. Below the node listing, there is a navigation bar with tabs: 'Details' (which is selected), 'Map', 'Queueing', and 'Endpoints'. Under the 'Details' tab, there is a section titled 'Editing Unmanaged Node Details' containing fields for Address (10.0.0.1), Name (Acme), Default endpoint type (SSH), SSH Port (22), and SSH Encryption (AES256-ctr). At the bottom left of this section is a blue 'Update' button.

The Acme node is now listed on the Unmanaged Nodes page.

5. Click List Managed Nodes.

The screenshot shows the 'Unmanaged Nodes' listing page. At the top, there is a search bar labeled 'Type to filter nodes' and a blue 'New Unmanaged Node' button. To its right, a red box highlights the 'List Managed Nodes' button. Below these, a table lists the node details:

ADDRESS	NAME	PORT	ACTIONS
10.0.0.1	Acme	22	<a href="#">edit</a> <a href="#">delete</a>

The preceding steps defined nodes for Console, but more details are required to perform and monitor transfers to and from the nodes. Endpoints must be defined for each node.

## 2.5.4. Adding endpoints

An endpoint serves as a transfer source or destination for transfers that are initiated in the Console user interface between nodes (managed or unmanaged) and between nodes and clusters. Endpoints are defined with a login credential and address.

- 1. Add an endpoint to the London managed node.
  - a. In the London node listing, click edit.

**Managed Nodes**

Managed Nodes										
<a href="#">New Managed Node</a> <a href="#">New Managed Cluster</a> <a href="#">List Unmanaged Nodes</a>										
Address	Name	Ssh Port	Node API Port	Hostname	Sessions	Status	OS	Last Restart	Failover Group	Action
10.0.0.2	Denver	33001	9092	denver	0	Active	Linux	11:22pm 21-Apr		<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3	London	33001	9092	london	0	Active	Linux	11:22pm 21-Apr		<a href="#">edit</a> <a href="#">delete</a>

\_\_\_ b. Click **Endpoints**.

**Node Maintenance**

London (10.0.0.3)

Details	Credentials	Configuration	Vlinks	Queueing	Accounts	Endpoints	Map	Cleanup	About
<b>Editing Node Details</b> IP Address: 10.0.0.3 (cannot be a domain name)									
Name: London (limit 100 characters)									

\_\_\_ c. Click **Add Endpoint**.

London (10.0.0.3)

Details	Credentials	Configuration	Vlinks	Queueing	Accounts	Endpoints	Map	Cleanup	About
<b>Saved Endpoints</b>									
<a href="#">Add Endpoint</a>									
LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS			
*	London (10.0.0.3:9092)					<a href="#">edit</a> <a href="#">delete</a>			

\_\_\_ d. Enter the following values in the appropriate fields:

- Endpoint type: **Node API**
- Login: **node\_admin**
- Password: **passw0rd**
- Email Address: Enter a personal email address and click **Add**

\_\_\_ e. Change ON START to **No notification**.

\_\_\_ f. Change ON SUCCESS to **No notification**.

\_\_\_ g. Click **Create**.

**Node Maintenance**

London (10.0.0.3)

[List Managed Nodes](#)

[Details](#) [Credentials](#) [Configuration](#) [Vlinks](#) [Queueing](#) [Accounts](#) [Endpoints](#) [Map](#) [Cleanup](#) [About](#)

**New Endpoint**

[List Endpoints](#)

Endpoint type: Node API

Login: node\_admin

Password: \*\*\*\*\*

Port: 9092

Use HTTPS (recommended)

Verify SSL certificate

Label: (optional) - Descriptive name for this endpoint. If omitted, endpoint will be listed as "user@node\_address"

Email Notifications:

Email address: [ ] [Add](#)

EMAIL ADDRESS	ON START	ON SUCCESS	ON ERROR
con_admin@example.com	No notification	No notification	(default) Default Error

[Create](#)

A message of **Endpoint created** appears at the top of the London Saved Endpoints page. The new endpoint appears in the list of Saved Endpoints list with options to edit, delete, or test the endpoint.

h. In the node\_admin@10.0.0.3 line, click **test**.

**Node Maintenance**

Endpoint created.

London (10.0.0.3)

[List Managed Nodes](#)

[Details](#) [Credentials](#) [Configuration](#) [Vlinks](#) [Queueing](#) [Accounts](#) [Endpoints](#) [Map](#) [Cleanup](#) [About](#)

**Saved Endpoints**

[Add Endpoint](#)

LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS
*	London (10.0.0.3:9092)					<a href="#">edit</a> <a href="#">delete</a>
node_admin	London (node_admin@10.0.0.3:9092) [NodeAPI]	NodeAPI	9092	<input checked="" type="checkbox"/>		<a href="#">edit</a> <a href="#">delete</a> <a href="#">test</a>

\_\_ i. Click **Test Connecting to Host**.

The screenshot shows the 'Node Maintenance' page for a node named 'London (10.0.0.3)'. At the top, there's a navigation bar with tabs: Details, Credentials, Configuration, Vlinks, Queueing, Accounts, Endpoints, Map, Cleanup, and About. A blue button labeled 'List Managed Nodes' is located in the top right corner. Below the navigation bar, a section titled 'Connection Test For: London (node\_admin@10.0.0.3:9092) [NodeAPI]' displays the following details:

- Host: 10.0.0.3
- Port: 9092
- Login: node\_admin
- Password: \*\*\*\*\*

At the bottom of this section is a blue button labeled 'Test Connecting to Host', which is also highlighted with a red box.

If unsuccessful, a description of the error appears in red at the top of the page. Resolve the problem if necessary.

If successful, a confirmation message appears in green at the top of the page.

\_\_ j. Click **List Managed Nodes**.

The screenshot shows the 'Node Maintenance' page for 'London (10.0.0.3)'. At the top, a green message box contains the text 'Connection test was successful for \'London (node\_admin@10.0.0.3:9092) [NodeAPI]\''. In the top right corner, a blue button labeled 'List Managed Nodes' is highlighted with a red box. Below the message, there's a section titled 'Saved Endpoints' with a 'Add Endpoint' button. A table lists saved endpoints:

LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS
*	London (10.0.0.3:9092)					<a href="#">edit</a> <a href="#">delete</a>
node_admin	London (node_admin@10.0.0.3:9092) [NodeAPI]	NodeAPI	9092	✓		<a href="#">edit</a> <a href="#">delete</a> <a href="#">test</a>

\_\_ 2. Add an endpoint to the Denver managed node.

\_\_ a. In the Denver listing, click **edit**.

The screenshot shows the 'Managed Nodes' page. At the top, there's a search bar labeled 'Type to filter nodes' and three buttons: 'New Managed Node', 'New Managed Cluster', and 'List Unmanaged Nodes'. Below the search bar is a table with columns: ADDRESS, NAME, SSH PORT, NODE API PORT, HOSTNAME, SESSIONS, STATUS, OS, LAST RESTART, FAILOVER GROUP, and ACTIONS. Two rows are listed:

ADDRESS	NAME	SSH PORT	NODE API PORT	HOSTNAME	SESSIONS	STATUS	OS	LAST RESTART	FAILOVER GROUP	ACTIONS
10.0.0.2	Denver	33001	9092	denver	0	Active	Linux	8:10am 10-Apr		<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3	London	33001	9092	london	0	Active	Linux	1:56pm 31-Mar		<a href="#">edit</a> <a href="#">delete</a>

\_\_ b. Click **Endpoints**.

Node Maintenance

London (10.0.0.3)

List Managed Nodes

Endpoints

Editing Node Details

IP Address	10.0.0.3 cannot be a domain name
Name	London limit 100 characters

\_\_ c. Click **Add Endpoint**.

Node Maintenance

Denver (10.0.0.2)

List Managed Nodes

Endpoints

Saved Endpoints

LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS
*	Denver (10.0.0.2:9092)					<a href="#">edit</a> <a href="#">delete</a>

Add Endpoint

\_\_ d. Configure the endpoint by entering the following values into the appropriate fields:

- Endpoint type: **Node API**
- Login: **node\_admin**
- Password: **passw0rd**

\_\_ e. Click **Create**.

**Node Maintenance**

Denver (10.0.0.2)

[List Managed Nodes](#)

[Details](#) [Credentials](#) [Configuration](#) [Vlinks](#) [Queueing](#) [Accounts](#) [Endpoints](#) [Map](#) [Cleanup](#) [About](#)

**New Endpoint**

[List Endpoints](#)

Endpoint type: Node API

Login: node\_admin

Password: \*\*\*\*\*

Port: 9092

Use HTTPS (recommended)

Verify SSL certificate

Label: (optional) - Descriptive name for this endpoint. If omitted, endpoint will be listed as "user@node\_address"

Email Notifications

Email address: [ ] [Add](#)

EMAIL ADDRESS      ON START      ON SUCCESS      ON ERROR

[Create](#)

The Endpoint created message appears and the new endpoint is listed in the Saved Endpoints section.

- \_\_\_ f. In the listing of the new endpoint, click **test**.

**Node Maintenance**

Endpoint created.

Denver (10.0.0.2)

[List Managed Nodes](#)

[Details](#) [Credentials](#) [Configuration](#) [Vlinks](#) [Queueing](#) [Accounts](#) [Endpoints](#) [Map](#) [Cleanup](#) [About](#)

**Saved Endpoints**

[Add Endpoint](#)

LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS
*	Denver (10.0.0.2:9092)					<a href="#">edit</a> <a href="#">delete</a>
node_admin	Denver (node_admin@10.0.0.2:9092) [NodeAPI]	NodeAPI	9092	<input checked="" type="checkbox"/>		<a href="#">edit</a> <a href="#">delete</a> <a href="#">test</a>

- \_\_\_ g. Click **Test Connecting to Host**.

■ Connection Test For: Denver (node\_admin@10.0.0.2:9092) [NodeAPI]

Host	10.0.0.2
Port	9092
Login	node_admin
Password	*****

**Test Connecting to Host**

- \_\_\_ h. If the connection is not successful, check the configuration of the endpoint values and retest.

If the test is successful, the **Connection test was successful for 'Denver (node\_admin@10.0.0.2:9092) [NodeAPI]' message** is displayed at the top of the page.

- \_\_\_ i. Click **List Managed Nodes**.

Node Maintenance

Connection test was successful for 'Denver (node\_admin@10.0.0.2:9092) [NodeAPI]'.

Denver (10.0.0.2)

**List Managed Nodes**

Details Credentials Configuration Vlinks Queueing Accounts Endpoints Map Cleanup About

**Saved Endpoints**

Add Endpoint

LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS
*	Denver (10.0.0.2:9092)					<a href="#">edit</a> <a href="#">delete</a>
node_admin	Denver (node_admin@10.0.0.2:9092) [NodeAPI]	NodeAPI	9092			<a href="#">edit</a> <a href="#">delete</a> <a href="#">test</a>

- \_\_\_ 3. Create an endpoint on the Acme non-managed node.

- \_\_\_ a. Click **List Unmanaged Nodes**.

Managed Nodes

Type to filter nodes

New Managed Node New Managed Cluster **List Unmanaged Nodes**

ADDRESS	NAME	SSH PORT	NODE API PORT	HOSTNAME	SESSIONS	STATUS	OS	LAST RESTART	FAILOVER GROUP	ACTIONS
10.0.0.2	Denver	33001	9092	denver	0	Active	Linux	8:10am 10-Apr		<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3	London	33001	9092	london	0	Active	Linux	1:56pm 31-Mar		<a href="#">edit</a> <a href="#">delete</a>

- \_\_\_ b. In the line that shows the Acme node, click **edit**.

IBM Aspera Console

Nodes

Unmanaged Nodes

ADDRESS	NAME	PORT	ACTIONS
10.0.0.1	Acme	22	<a href="#">edit</a> <a href="#">delete</a>

New Unmanaged Node List Managed Nodes

\_\_\_ c. Click **Endpoints**.

Details Map Queueing Endpoints

■ Editing Unmanaged Node Details

Address	10.0.0.1
Name	Acme limit 100 characters
Default endpoint type	SSH
SSH Port	22
SSH Encryption	AES256-ctr

Update

\_\_\_ d. Click **Add Endpoint**.

Unmanaged Nodes

Acme (10.0.0.1)

Endpoints

■ Saved Endpoints

LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS
*	Acme (10.0.0.1)	SSH	22			<a href="#">edit</a> <a href="#">delete</a>

List Unmanaged Nodes Add Endpoint

\_\_\_ e. Configure the endpoint by entering the following values in the appropriate fields:

- Endpoint type: **SSH**
- Login: **xfer**
- Password: **passw0rd**

\_\_\_ f. Click **Create**.

**Unmanaged Nodes**

Acme (10.0.0.1)

[List Unmanaged Nodes](#)

[Details](#) [Map](#) [Queueing](#) [Endpoints](#)

**New Endpoint**

Endpoint type: SSH

Login: xfer

Use SSH Key

Password:

Port: 22

Use HTTPS (recommended)

Verify SSL certificate

Label:

(optional) - Descriptive name for this endpoint. If omitted, endpoint will be listed as "user@node\_address"

Email Notifications

Email address:  [Add](#)

EMAIL ADDRESS	ON START	ON SUCCESS	ON ERROR

[Create](#)

The Endpoint created message appears and the new endpoint is listed in the Saved Endpoints section.

g. In the listing for Acme with a saved password, click **test**.

**Unmanaged Nodes**

Acme (10.0.0.1)

[List Unmanaged Nodes](#)

[Details](#) [Map](#) [Queueing](#) [Endpoints](#)

**Saved Endpoints**

[Add Endpoint](#)

LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS
*	Acme (10.0.0.1)	SSH	22			<a href="#">edit</a> <a href="#">delete</a>
xfer	Acme (xfer@10.0.0.1) [SSH]	SSH	22	<input checked="" type="checkbox"/>		<a href="#">edit</a> <a href="#">delete</a> <a href="#">test</a>

h. Click **Test Connecting to Host**.

**Unmanaged Nodes**

Acme (10.0.0.1)

Details Map Queueing Endpoints

■ Connection Test For: Acme (xfer@10.0.0.1) [SSH]

Host	10.0.0.1
Port	22
Login	xfer
Password	*****

**Test Connecting to Host**

- \_\_\_ i. A message is presented that indicates success for the connection.
- \_\_\_ j. If you receive a message about a refused connection, go to the Troubleshooting section, then retest the connection.

**Unmanaged Nodes**

Acme (10.0.0.1)

List Unmanaged Nodes

Details Map Queueing **Endpoints**

■ Saved Endpoints

Add Endpoint

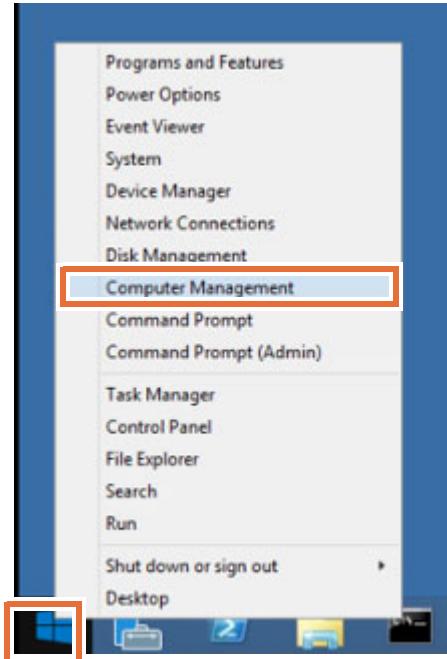
LOGIN	LABEL	TYPE	PORT	PASSWORD SAVED	SSH KEY	ACTIONS
*	Acme (10.0.0.1)	SSH	22			<a href="#">edit</a> <a href="#">delete</a>
xfer	Acme (xfer@10.0.0.1) [SSH]	SSH	22	<input checked="" type="checkbox"/>		<a href="#">edit</a> <a href="#">delete</a> <a href="#">test</a>



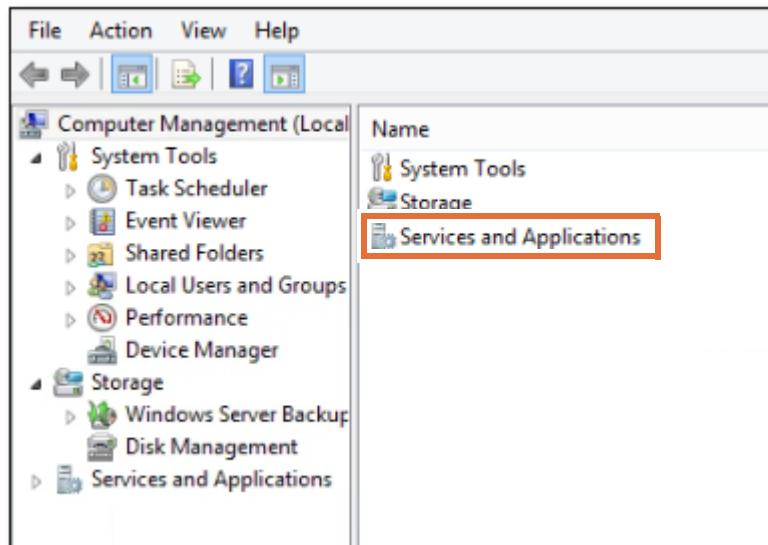
## Troubleshooting

If the connection test to Acme shows a message of “Unable to connect: Connection refused by node.”, check the configuration values that you entered when creating the endpoint. If these values are correct, it is likely that the OpenSSH service is not running on the Singapore system.

- 1) Right mouse click the **Start** button and select **Computer Management**.



2) Double-click **Services and Applications**.



3) Double-click **Services**.

Name	Type	Description
Routing and Remote ...	Routing and Remote Ac...	Routing and Remote Ac...
<b>Services</b>	Starts, stops, and config...	
WMI Control	Extension Snap-in	Configures and controls...

4) Highlight the **OpenSSH Service** entry.

5) Click **Start the service**.

Services (Local)					
OpenSSH Service	Name	Description	Status	Startup Type	Log On As
	IBM Aspera Sync	IBM Aspera ...	Automatic	\svcAspera	
	IKE and AuthIP IPsec Keying...	The IKEEXT ...	Running	Automatic (Trig...	Local Syste...
	Interactive Services Detection	Enables use...	Manual	Local Syste...	
	Internet Connection Sharin...	Provides ne...	Disabled	Local Syste...	
	Internet Explorer ETW Colle...	ETW Collect...	Manual	Local Syste...	
	IP Helper	Provides tu...	Running	Automatic	Local Syste...
	IPsec Policy Agent	Internet Pro...	Running	Manual (Trig...	Network S...
	KDC Proxy Server service (K...	KDC Proxy S...	Manual	Network S...	
	KtmRm for Distributed Tran...	Coordinates...	Manual (Trig...	Network S...	
	Link-Layer Topology Discov...	Creates a N...	Manual	Local Service	
	Local Session Manager	Core Windo...	Running	Automatic	Local Syste...
	Microsoft Account Sign-in ...	Enables use...	Manual (Trig...	Local Syste...	
	Microsoft iSCSI Initiator Ser...	Manages In...	Manual	Local Syste...	
	Microsoft Software Shadow...	Manages so...	Manual	Local Syste...	
	Microsoft Storage Spaces S...	Host service...	Manual	Network S...	
	Multimedia Class Scheduler	Enables rela...	Manual	Local Syste...	
	MySQL Server (IBM Aspera)	MySQL Serv...	Running	Automatic	\svcAspera
	Net.Tcp Port Sharing Service	Provides abi...	Disabled	Local Service	
	Netlogon	Maintains a ...	Manual	Local Syste...	
	Network Access Protection ...	The Networ...	Manual	Network S...	
	Network Connection Broker	Brokers con...	Running	Manual (Trig...	Local Syste...
	Network Connections	Manages o...	Running	Manual	Local Syste...
	Network Connectivity Assis...	Provides Dir...	Manual (Trig...	Local Syste...	
	Network List Service	Identifies th...	Running	Manual	Local Service
	Network Location Awareness	Collects an...	Running	Automatic	Network S...
	Network Store Interface Ser...	This service ...	Running	Automatic	Local Service
	Offline File	The Offline	Disabled	Local Syste...	
	OpenSSH Service		Automatic	\svcAspera	

- 6) Go back to the Connection Test For: Acme (xfer@10.0.0.1) [SSH] page and click **Test Connecting to Host**.

---

You defined endpoints on both the managed nodes and the unmanaged node. You use these endpoints to configure transfers and monitoring functions in a later exercise.

## 2.5.5. Modify managed node configuration parameters

Both the Denver and London managed nodes were configured with an administrative account (root) as the account for SSH connections. Console uses the SSH account to log in to a node when you want to modify a remote node's configuration. The next steps demonstrate how you change the configuration of a managed node from within the Console user interface. Specifically, you modify the docroot value for the xfer user account on the London node.

- 1. Click **Nodes**.

IBM Aspera Console

Nodes

Unmanaged Nodes

Connection test was successful for 'Acme (xfer@10.0.0.1) [SSH]'.

Acme (10.0.0.1)

List Unmanaged Nodes

2. In the listing for London, click **edit**.

Nodes

Managed Nodes

Type to filter nodes

New Managed Node New Managed Cluster List Unmanaged Nodes

ADDRESS	NAME	SSH PORT	NODE API PORT	HOSTNAME	SESSIONS	STATUS	OS	LAST RESTART	FAILOVER GROUP	ACTIONS
10.0.0.2	Denver	33001	9092	denver	0	Active	Linux	8:10am 10-Apr		<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3	London	33001	9092	london	0	Active	Linux	1:56pm 31-Mar		<a href="#">edit</a> <a href="#">delete</a>

3. Click **Accounts**.

Node Maintenance

London (10.0.0.3)

List Managed Nodes

Details Credentials Configuration Vlinks Queueing Accounts Endpoints Map Cleanup About

Editing Node Details

IP Address: 10.0.0.3 (cannot be a domain name)

Name: London (limit 100 characters)



The system must retrieve the configuration parameters for the London node, so you might experience a delay before the configuration page appears.

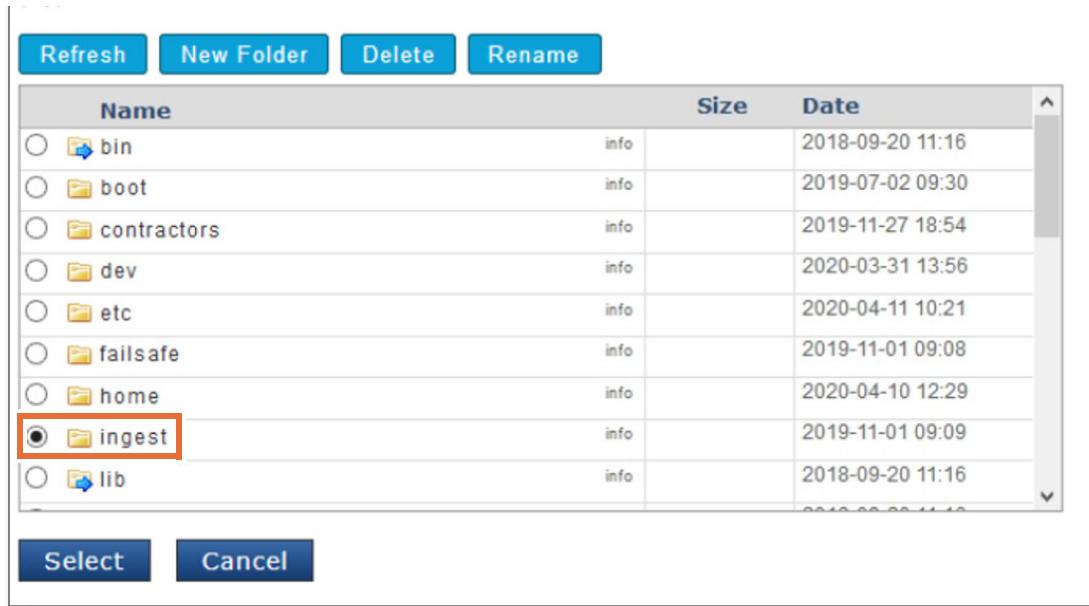
- \_\_\_ 4. In the listing for xfer, click **edit**.

TYPE	NAME	ACTIONS
User	user1	<a href="#">edit</a> <a href="#">delete</a>
User	xfer	<a href="#">edit</a> <a href="#">delete</a>

- \_\_\_ 5. Click **Docroot**.  
\_\_\_ 6. Click **Browse** to select a new docroot value for the xfer user.

EFFECTIVE VALUE	
<input type="radio"/> true	<input type="radio"/> false
<input type="radio"/> true	<input type="radio"/> false
<input type="radio"/> true	<input type="radio"/> false

- \_\_\_ 7. Select the **ingest** directory.  
\_\_\_ 8. Click **Select**.



The **/ingest** directory is identified as the new docroot.

9. Click **Save changes** to save your modification.



You modified the configuration of the xfer user account on the London server. However, many configuration parameters for users and the system can be managed from Console, as if you were directly logged in to the remote node.

## End of exercise

## Exercise review and wrap-up

The first part of the exercise added the two Linux servers as managed nodes and added the Windows server as an unmanaged node.

You then created endpoints on each of the nodes.

The final task was to modify a configuration parameter (docroot) on the London server from the Console application.

---

# Exercise 3. Managing Console users and groups

## Estimated time

00:30

## Overview

This unit provides hands-on experience in working with groups, adding users, and defining transfer paths.

## Objectives

After completing this exercise, you should be able to:

- Explain the concept of a transfer path as it relates to Console users
- Add and remove Console user and group accounts
- Assign permissions for Console user

## Introduction

Console uses a combination of groups, transfer paths, and user accounts to manage user permissions. The tasks in this exercise have you use the default groups that were created when nodes were added.

## Requirements

The tasks in the exercise use all three servers in the lab environment.

## 3.6. Working with Console users

A Console user is a Console login account with customizable access permissions. Except for administrator accounts, Console user permissions are managed through group assignment. A Console user inherits permissions from its groups. Users can be a member of multiple groups.

### 3.6.1. Creating Console users

Console administrators are able to view and control all transfers. They automatically inherit permissions of any existing Console groups. They can add, edit, and delete any nodes, Console users, and Console groups. The first task in this section is to create another Console administrator account;

- 1. Continue on the Singapore server.
  - 2. If you need to sign in, use these credentials:
    - Username: `con_admin`
    - Password: `Passw0rd_`
  - 3. Click **Accounts**.
- Notice that the account you created during the installation, `con_admin`, is listed under the Users heading.
- 4. Click **New User**.

GLOBAL PERMISSIONS							
LOGIN	NAME	EMAIL	DIRECTORY	TIME ZONE	ACTIVE	ADMIN	ACTIONS
con_a...	con_a...	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">edit</a>	

- 5. Enter the following values:
  - Login: `admin2`
  - Email: `admin2@example.com`
  - Time zone: Select your time zone
- 6. Select **Set password** and enter the following values:
  - Password: `aspera`
  - Confirm Password: `aspera`
- 7. Select **Console Administrator**.

- 8. Click **Create**.

**Accounts**

Users Groups Directories SAML Access Log Edit User admin2 (admin2)

■ User Information

Login	admin2
First name	
Last name	
Email	admin2@example.com
Time zone	(GMT-08:00) Pacific Time (US & Canada)
<input checked="" type="checkbox"/> Set password	
Password	*****
Confirm Password	*****

■ Permissions

<input checked="" type="checkbox"/> Active (allow user to login)
Reports Allowed
<input checked="" type="checkbox"/> Console Administrator

Update

The **Accounts** page is presented.

**Accounts**

User was successfully created.

Users Groups Directories SAML Access Log

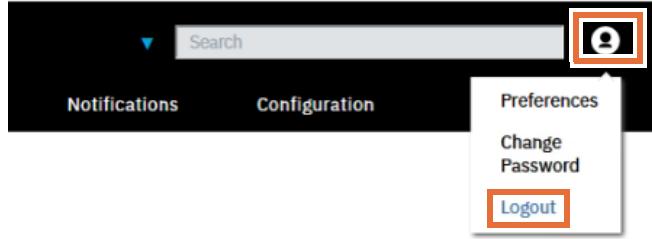
■ Users

New User

GLOBAL PERMISSIONS							
LOGIN	NAME	EMAIL	DIRECTORY	TIME ZONE	ACTIVE	ADMIN	ACTIONS
admin2	admin...	admin2@example.com	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">edit</a> <a href="#">delete</a> <a href="#">reset password</a>
con_a...	con_a...	con_a@example.com	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">edit</a>

The admin2 account is configured as a Console administrator, meaning the account can perform any administrative task on the Console system.

- 9. Log off from the browser by clicking the user icon in the upper-right corner and selecting **Log out**.



- \_\_\_ 10. Log back in with the **admin2** and **aspera** credentials.
- \_\_\_ 11. Reset the password for the admin2 account to be **Passw0rd\_**.

Notice that the interface for admin2 account is the same as for the **con\_admin** account.

A screenshot of the IBM Aspera Console interface. The top navigation bar includes 'Dashboard' (highlighted in blue), 'Activity', 'Nodes', 'Accounts', 'Transfer', 'Reports', 'Notifications', and 'Configuration'. Below the navigation bar, a message 'Password updated successfully.' is displayed in green. Under the 'Accounts' section, there is a 'Current Transfers' card with the subtext 'There are no current transfers'. To the right of the card is a 'Map' icon.

The next tasks step through the creation of non-administrative users that are assigned to one of the default Console groups that are created when the nodes are added.



### Reminder

The **Create default Console groups** option can be marked when nodes are created. The three default groups that are created for each node are:

- Transfer Administrators
- Transfer Initiators
- Transfer Monitors

Each of the groups is pre-defined with permissions to allow group members to perform specific tasks associated with a specific node.

Console also includes the ALL NODES groups that provide members with permissions across all nodes, not just a single node.

- 
- \_\_\_ 1. Create a user account to monitor all transfers on all nodes.
    - \_\_\_ k. Click **Accounts**.
    - \_\_\_ l. Click **New User**.
    - \_\_\_ m. Enter the following values into the appropriate fields:
      - Login: **bsmith**
      - First name: **Bob**
      - Last name: **Smith**
      - Email: **bob@example.com**
      - Time zone: Select your local time zone

- \_\_\_ n. Select **Set password** and enter the following values:
- Password: **aspera**
  - Confirm Password: **aspera**
- \_\_\_ o. Click **Create**.

The screenshot shows the 'New User' creation interface. At the top, there are tabs: Users, Groups, Directories, SAML, Access Log, and New User (which is selected). Below the tabs, under 'User Information', the following fields are filled:

Login	bsmith
	limit 40 characters
First name	Bob
Last name	Smith
Email	bsmith@example.com
Time zone	(GMT-08:00) Pacific Time (US & Canada)
<input checked="" type="checkbox"/> Set password If unchecked, user will be sent a temporary password via email upon account creation	
Password	*****
Confirm Password	*****

Under 'Permissions', the following checkboxes are selected:

- Active (allow user to login)
- Reports Allowed
- Console Administrator

A blue 'Create' button is located at the bottom left of the form, with a red box highlighting it.

After creating a non-admin user, Console redirects you to the user permissions page.

**Accounts**

User was successfully created.

Users Groups Directories SAML Access Log Permissions for Bob Smith (bsmith)

Group Memberships Back to Edit User

-- Select a Group -- Add

NAME	DESCRIPTION	DIRECTORY	ACTIONS

Transfer Permissions

TRANSFER PATH			USER PERMISSIONS				OTHER PERMISSIONS		
ENDPOINT	DIRECTION	ENDPOINT	START SMART	START SIMPLE	CREATE SMART	SHARE SMART	CONTROL	VIEW	EMAIL

User permissions are based on their group membership. If a user is responsible for monitoring all transfers across all nodes, the account you created needs permissions that allow the user to view all transfers from all nodes. The group that provides those permissions is the ALL NODES- Transfer Monitors

- 1. In the Group Membership list, select the **ALL NODES - Transfer Monitors** group.

Users Groups Directories SAML Access Log Permissions for Bob Smith (bsmith)

Group Memberships Back to Edit User

ALL NODES - Transfer Monitors Add

- 2. Click **Add**.

The page changes to show that the user is a member of the group and the details of permissions that are assigned to the user

- 3. Click **Back to Edit User**.

**Accounts**

Group added to User.

Users Groups Directories SAML Access Log Permissions for bsmith (bsmith)

Group Memberships Back to Edit User

-- Select a Group -- Add

NAME	DESCRIPTION	DIRECTORY	ACTIONS
ALL NODES - Transfer Monitors	Sees all transfers on all nodes	Local Database	delete

Transfer Permissions

TRANSFER PATH			USER PERMISSIONS				OTHER PERMISSIONS		
ENDPOINT	DIRECTION	ENDPOINT	START SMART	START SIMPLE	CREATE SMART	SHARE SMART	CONTROL	VIEW	EMAIL
Any	→	Any							

— 4. Click **Update**.

**User Information**

Login	bsmith limit 40 characters
First name	Bob
Last name	Smith
Email	bsmith@example.com
Time zone	(GMT-08:00) Pacific Time (US & Canada)
<input type="checkbox"/> Set password	

**Permissions**

<input checked="" type="checkbox"/> Active (allow user to login)
<input checked="" type="checkbox"/> Reports Allowed
<input type="checkbox"/> Console Administrator

**Update**

Notice that the two users you created have various links in their listing. The admin2 account was assigned as a Console administrator and no permissions option is provided as an action. However, the bsmith user is a non-administrative account, so a permissions link is shown. Clicking the permissions link reopens the permissions page so you can change the user's group membership to change permissions

— 5. Create a user to manage all transfers to or from the London node.

— a. Click **New User**.

**Users**

GLOBAL PERMISSIONS							
LOGIN	NAME	EMAIL	DIRECTORY	TIME ZONE	ACTIVE	ADMIN	ACTIONS
admin2	admin...	admin...	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">edit</a> <a href="#">delete</a> <a href="#">reset password</a>
bsmith	Bob S...	bsmith...	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>		<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>
con_a...	con_a...	con_a...	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">edit</a>

**New User**

— b. Create a user with the following entries:

- Login: **sjones**
- First name: **Sally**
- Last name: **Jones**
- Email: **sjones@example.com**
- Time zone: Select to your local time zone
- Select **Set Password**
- Password: **aspera**
- Confirm Password: **aspera**

\_\_ c. Click **Create**.

Accounts

Users Groups Directories SAML Access Log New User

User Information

Login sjones  
limit 40 characters

First name Sally

Last name Jones

Email sjones@example.com

Time zone (GMT-08:00) Pacific Time (US & Canada) ▾

Set password  
If unchecked, user will be sent a temporary password via email upon account creation

Password \*\*\*\*\*

Confirm Password \*\*\*\*\*

Permissions

Active (allow user to login)  
 Reports Allowed  
 Console Administrator

Create

\_\_ d. Assign the **10.0.0.3 - Transfer Administrator** group.

\_\_ e. Click **Add** to assign the user to the group.

The screenshot shows a navigation bar with tabs: Users, Groups, Directories, SAML, Access Log, and Permissions for Sally Jones (sjones). The 'Permissions for Sally Jones (sjones)' tab is selected. Below the navigation bar, there is a section titled 'Group Memberships' with a dropdown menu showing '10.0.0.3 - Transfer Administrators' and an 'Add' button. A table below lists group details:

NAME	DESCRIPTION	DIRECTORY	ACTIONS
10.0.0.3 - Transfer Administrators	Sees and controls all transfers on 10.0.0.3	Local Database	<a href="#">delete</a>

As before, the page changes to show that the user was added to the group.

- \_\_\_ f. Click **Back to Edit User**.

The screenshot shows the 'Group Memberships' page with a dropdown menu showing '-- Select a Group --' and an 'Add' button. A table lists group details, with the row for '10.0.0.3 - Transfer Administrators' highlighted by a red box. The 'Actions' column for this row contains a link with a red box around it.

NAME	DESCRIPTION	DIRECTORY	ACTIONS
10.0.0.3 - Transfer Administrators	Sees and controls all transfers on 10.0.0.3	Local Database	<a href="#">delete</a>

- \_\_\_ g. Click **Update**.

The screenshot shows the 'User Information' update form. It has two sections: 'User Information' and 'Permissions'. In the 'User Information' section, fields include Login (sjones), First name (Sally), Last name (Jones), Email (sjones@example.com), and Time zone ((GMT-08:00) Pacific Time (US & Canada)). There is also a 'Set password' checkbox. In the 'Permissions' section, checkboxes are checked for Active (allow user to login), Reports Allowed, and Console Administrator. At the bottom is a blue 'Update' button with a red box around it.

You are brought back to the Users page.

The previous steps created three users, each getting their permissions from one of the default groups. You use these accounts in later exercises to see what their permissions allow them to do in Console.

- \_\_\_ 6. Create a user with no assigned permissions.  
\_\_\_ a. Click **New User**.

GLOBAL PERMISSIONS							
LOGIN	NAME	EMAIL	DIRECTORY	TIME ZONE	ACTIVE	ADMIN	ACTIONS
admin2	admin...	admin...	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">edit</a> <a href="#">delete</a> <a href="#">reset password</a>
bsmith	Bob S...	bsmith...	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>		<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>
con_a...	con_a...	con_a...	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">edit</a>
sjones	Sally J...	sjones...	Local Database	Pacific Time (US & Canada)	<input checked="" type="checkbox"/>		<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>

\_\_ b. Enter the following values in the appropriate fields:

- Login: **acme**
- Email: **acme@example.com**
- Time zone: Select your local time zone
- Select **Set Password**
- Password: **aspera**
- Confirm Password: **aspera**

\_\_ c. Click **Create**.

The form contains the following fields:

- User Information:
  - Login: acme
  - First name: (empty)
  - Last name: (empty)
  - Email: acme@example.com
  - Time zone: (GMT-08:00) Pacific Time (US & Canada)
  - Set password: If unchecked, user will be sent a temporary password via email upon account creation.
  - Password: (redacted)
  - Confirm Password: (redacted)
- Permissions:
  - Active (allow user to login)
  - Reports Allowed
  - Console Administrator

**Create**

Console opens the Group Membership page, but the group for this user does not exist. You assign group membership later in this exercise.

\_\_ d. Click **Back to Edit User** to return to the **Users** page.

The screenshot shows the 'Permissions for acme (acme)' page. At the top, a green message says 'User was successfully created.' Below it, there are tabs for 'Users', 'Groups', 'Directories', 'SAML', 'Access Log', and 'Permissions for acme (acme)'. The 'Permissions for acme (acme)' tab is selected. A section titled 'Group Memberships' contains a dropdown menu labeled '-- Select a Group --' and an 'Add' button. To the right, a blue button labeled 'Back to Edit User' is highlighted with a red box. Another section titled 'Transfer Permissions' includes a table with columns for Transfer Path, Endpoint, Direction, Endpoint, User Permissions (Start Smart, Start Simple, Create Smart, Share Smart), and Other Permissions (Control, View, Email). The 'Edit Permissions' button is located at the top right of this section.

\_\_ e. Click **Update** to return to the Users page

The screenshot shows the 'Edit User' page. It has two main sections: 'User Information' and 'Permissions'. In 'User Information', fields include Login (acme), First name, Last name, Email (acme@example.com), Time zone ((GMT-08:00) Pacific Time (US & Canada)), and Password/Confirm Password (both masked as \*\*\*\*\*). In 'Permissions', checkboxes are checked for Active (allow user to login), Reports Allowed, and Active (allow user to login). At the bottom, a blue 'Update' button is highlighted with a red box. A watermark in the bottom right corner reads 'Activate Windows Go to System in Control Panel to activate'.

You return to the Users page

GLOBAL PERMISSIONS							
LOGIN	NAME	EMAIL	DIRECTORY	TIME ZONE	ACTIVE	ADMIN	ACTIONS
acme	acme...	Local Database	Pacific Time (US & Canada)	✓			<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>
admin2	admin...	Local Database	Pacific Time (US & Canada)	✓	✓		<a href="#">edit</a> <a href="#">delete</a> <a href="#">reset password</a>
bsmith	Bob S...	bsmith...	Local Database	Pacific Time (US & Canada)	✓		<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>
con_a...	con_a...	Local Database	Pacific Time (US & Canada)	✓	✓		<a href="#">edit</a>
sjones	Sally J...	sjones...	Local Database	Pacific Time (US & Canada)	✓		<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>

### 3.6.2. Creating groups

The permissions that are associated with the default Console groups are designed to meet most deployment requirements. However, if these default groups do not provide the permissions that are required, you can create a custom group and define the needed permissions.

Groups can be created before creating user accounts, or after. You can add a user to an existing group when creating the user account or you can add existing user accounts to a group when you create the group.

The following task creates a custom group and assigns permissions to that group.

- 1. Click **Groups**.

GLOBAL PERMISSIONS							
LOGIN	NAME	EMAIL	DIRECTORY	TIME ZONE	ACTIVE	ADMIN	ACTIONS
acme	acme...	Local Database	Pacific Time (US & Canada)	✓			<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>
admin2	admin...	Local Database	Pacific Time (US & Canada)	✓	✓		<a href="#">edit</a> <a href="#">delete</a> <a href="#">reset password</a>
bsmith	Bob S...	bsmith...	Local Database	Pacific Time (US & Canada)	✓		<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>
con_a...	con_a...	Local Database	Pacific Time (US & Canada)	✓	✓		<a href="#">edit</a>
sjones	Sally J...	sjones...	Local Database	Pacific Time (US & Canada)	✓		<a href="#">edit</a> <a href="#">permissions</a> <a href="#">delete</a> <a href="#">reset password</a>

\_\_ 2. View group permissions..

The screenshot shows the 'Groups' tab selected in the navigation bar. A table lists nine groups under the heading 'Groups'. The columns are 'NAME', 'DESCRIPTION', 'DIRECTORY', 'TRANSFER PATHS', and 'ACTIONS'. The 'ACTIONS' column contains 'edit' and 'delete' links. The groups listed are:

NAME	DESCRIPTION	DIRECTORY	TRANSFER PATHS	ACTIONS
ALL NODES - Transfer Administrators	Sees and controls all transfers on all nodes	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
ALL NODES - Transfer Initiators	Can start transfers on all nodes, sees and controls transfers started by self	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
ALL NODES - Transfer Monitors	Sees all transfers on all nodes	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.2 - Transfer Administrators	Sees and controls all transfers on 10.0.0.2	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.2 - Transfer Initiators	Can start transfers on 10.0.0.2, sees and controls transfers started by self	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.2 - Transfer Monitors	Sees all transfers on 10.0.0.2	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3 - Transfer Administrators	Sees and controls all transfers on 10.0.0.3	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3 - Transfer Initiators	Can start transfers on 10.0.0.3, sees and controls transfers started by self	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3 - Transfer Monitors	Sees all transfers on 10.0.0.3	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>

The Groups page lists all existing groups. Because you marked the *Create default Console groups* checkbox when you created each node, the three groups for each node are shown. The ALL NODES groups (these groups are automatically created within Console, regardless of the number of nodes) are also shown.

\_\_ a. Click **edit** associated with the ALL NODES Transfer Monitor group.

The screenshot shows the same Groups table from the previous screenshot. The 'ALL NODES - Transfer Monitors' row is highlighted. The 'edit' link in the 'ACTIONS' column for this row is highlighted with a red box.

The **Editing Group Details** page appears.

The screenshot shows the 'Editing Group Details' page for the group 'ALL NODES - Transfer Monitors'. The top navigation bar includes 'Users', 'Groups', 'Directories', 'SAML', 'Access Log', and the current tab 'Edit Group ' ALL NODES - Transfer Monitors''. Below the tabs, there are sections for 'Editing Group Details' and 'Transfer Paths'.

**Editing Group Details:**

- Name:** ALL NODES - Transfer Monitors (limit 45 characters)
- Description:** Sees all transfers on all nodes
- Directory:** Local Database

**Transfer Paths:**

Endpoint	Direction	Endpoint	User Permissions				Other Permissions		
			Start Smart	Start Simple	Create Smart	Share Smart	Control	View	Email
Any	↔	Any					✓	✓	<a href="#">edit</a> <a href="#">delete</a>

**Members:**

-- Select User -- [Add](#)

None

A transfer path determines a user's permissions to create, initiate, and monitor transfers from one endpoint to another. A transfer path consists of two endpoints, the transfer direction (one-way or two-way), and a set of permissions that authorize starting transfers, monitoring transfers, and enabling email notifications.

The Transfer Paths of the **ALL NODES - Transfer Monitors** shows that members can monitor transfers to or from any node.

The page also provides an option to add users to the group.

No changes are needed for this group.

- \_\_\_ b. Click **Groups** to return to the **Groups** page.

The screenshot shows the 'Groups' page. The top navigation bar includes 'Users', 'Groups' (which is highlighted with an orange box), 'Directories', 'SAML', and 'Access Log', along with the current tab 'Edit Group ' ALL NODES - Transfer Monitors''. Below the tabs, there is a section for 'Editing Group Details' and a 'Transfer Paths' section.

\_\_\_ 3. Create a group called acme.

\_\_\_ a. Click **New Group**.

The screenshot shows the 'Accounts' interface with the 'Groups' tab selected. Below the tabs, there's a section titled 'Groups' containing a table. The table has columns for 'NAME', 'DESCRIPTION', 'DIRECTORY', 'TRANSFER PATHS', and 'ACTIONS'. One row is visible: 'ALL NODES - Transfer Administrators' with 'Sees and controls all transfers on all nodes' in the description, 'Local Database' in the directory, '1' in the transfer paths, and edit/delete links in the actions column. The 'New Group' button at the top right is highlighted with a red box.

The **Creating New Group** page appears

\_\_\_ b. Enter `to_acme` in the Name field.

The **Description** field is optional. However, providing a description of what the group can do is useful for future reference.

\_\_\_ c. Enter the following text in the **Description** field:

`Can initiate transfers only from the Denver node to the Acme node.`

\_\_\_ d. Click **Create**.

The screenshot shows the 'Creating New Group' form. It has fields for 'Name' (containing 'to\_acme'), 'Description' (containing 'Can initiate transfers only from the Denver node to the Acme node.'), and 'Directory' (set to 'Local Database'). At the bottom is a 'Create' button, which is highlighted with a red box.

The **Editing Group Details** page appears.

\_\_\_ e. Click **Add Transfer Path**.

**Accounts**

**Group was successfully created.**

Users	Groups	Directories	SAML	Access Log	Edit Group 'to_acme'
-------	--------	-------------	------	------------	----------------------

■ **Editing Group Details**

Name	<input type="text" value="to_acme"/>
limit 45 characters	
Description	Can initiate transfer only from the Denver node to the Acme node.
Directory	<input type="button" value="Local Database"/>

■ **Transfer Paths**

None

■ **Members**

<input type="button" value="-- Select User --"/>	<input type="button" value="Add"/>
--	------------------------------------

None

The **New Transfer Path** page is displayed

\_\_\_ f. Use the menus to select entries as follows:

- Endpoint 1: **Denver** (`node_admin@10.0.0.2`) [**NodeAPI**]
- Direction: **to**
- Endpoint 2: **Acme** (`xfer@10.0.0.1`) [**SSH**]
- Select **Start Simple Transfers**
- Select **Start Smart Transfers**

\_\_\_ g. Click **Create**.

Users Groups Directories SAML Access Log New Path for 'to\_acme'

■ New Transfer Path

Endpoint 1: Denver (node\_admin@10.0.0.2:9092) [NodeAPI] | Back to Edit Group

Direction: to

Endpoint 2: Acme (xfer@10.0.0.1) [SSH]

Group permissions: Select all | Deselect all

Start Simple Transfers  
 Start Smart Transfers  
 Create Smart Transfers  
 Share Smart Transfers  
 Control Transfers started by others  
 View Transfers started by others  
 Opt-in to email notifications

Description:

**Create**

The Users page reopens.

Accounts

Path was created.

Users Groups Directories SAML Access Log Edit Group 'to\_acme' | Add Transfer Path

■ Editing Group Details

Name: to\_acme  
Description: Can initiate transfers only from the Denver node to the Acme node.  
Directory: Local Database

■ Transfer Paths

TRANSFER PATH			USER PERMISSIONS				OTHER PERMISSIONS			
ENDPOINT	DIRECTION	ENDPOINT	START SMART	START SIMPLE	CREATE SMART	SHARE SMART	CONTROL	VIEW	EMAIL	ACTIONS
Denver (10.0.0.2:9092)	→	Acme (xfer@10.0.0.1) [SSH]	✓	✓						edit delete

■ Members

- Select User - | Add

None

**Update**

- \_\_ h. In the Members list, select **acme** and click **Add**.

## ■ Members

-- Select User --

-- Select User --

Bob Smith (bsmith)

Sally Jones (sjones)

**Up acme**

**Add**

The page changes to indicate that the user acme is a member of the group.

- \_\_ i. Click **Update**.

Accounts

User added to Group.

Users Groups Directories SAML Access Log Edit Group 'to\_acme'

■ Editing Group Details

Name: to\_acme  
Description: Can initiate transfers only from the Denver node to the Acme node.  
Directory: Local Database

■ Transfer Paths

ENDPOINT	TRANSFER PATH		USER PERMISSIONS			OTHER PERMISSIONS				
	DIRECTION	ENDPOINT	START SMART	START SIMPLE	CREATE SMART	SHARE SMART	CONTROL	VIEW	EMAIL	ACTIONS
Denver (10.0.0.2:9092)	➡	Acme (xfer@10.0.0.1) [SSH]	✓	✓						<a href="#">edit</a> <a href="#">delete</a>

■ Members

-- Select User -- **Add**

LOGIN	NAME	DIRECTORY	ACTIONS
acme		Local Database	<a href="#">delete</a>

**Update**

**Accounts**

**Group was successfully updated.**

Users Groups Directories SAML Access Log Edit Group 'to\_acme'

■ Editing Group Details Add Transfer Path

Name	to_acme limit 45 characters
Description	Can initiate transfers only from the Denver node to the Acme node.
Directory	Local Database

■ Transfer Paths

ENDPOINT	TRANSFER PATH		USER PERMISSIONS				OTHER PERMISSIONS			
	DIRECTION	ENDPOINT	START SMART	START SIMPLE	CREATE SMART	SHARE SMART	CONTROL	VIEW	EMAIL	ACTIONS
Denver (10.0.0.2:9092)	→ Acme (xfer@10.0.0.1) [SSH]	✓	✓							<a href="#">edit</a> <a href="#">delete</a>

■ Members

-- Select User --		Add	
LOGIN	NAME	DIRECTORY	ACTIONS
acme		Local Database	<a href="#">delete</a>

**Update**

The **to\_acme** group now appears in the listing.

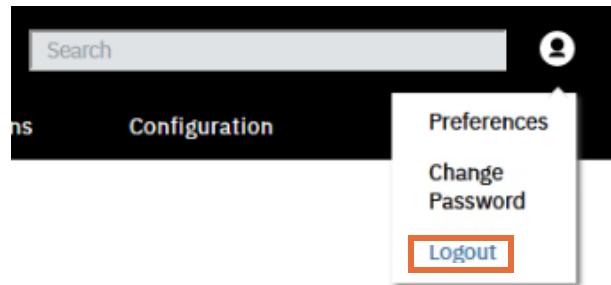
Users Groups Directories SAML Access Log

■ Groups New Group

NAME	DESCRIPTION	DIRECTORY	TRANSFER PATHS	ACTIONS
ALL NODES - Transfer Administrators	Sees and controls all transfers on all nodes	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
ALL NODES - Transfer Initiators	Can start transfers on all nodes, sees and controls transfers started by self	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
ALL NODES - Transfer Monitors	Sees all transfers on all nodes	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.2 - Transfer Administrators	Sees and controls all transfers on 10.0.0.2	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.2 - Transfer Initiators	Can start transfers on 10.0.0.2, sees and controls transfers started by self	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.2 - Transfer Monitors	Sees all transfers on 10.0.0.2	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3 - Transfer Administrators	Sees and controls all transfers on 10.0.0.3	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3 - Transfer Initiators	Can start transfers on 10.0.0.3, sees and controls transfers started by self	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
10.0.0.3 - Transfer Monitors	Sees all transfers on 10.0.0.3	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>
to_acme	Can initiate transfer to the Acme node	Local Database	1	<a href="#">edit</a> <a href="#">delete</a>

\_\_j. Close the browser.

\_\_ k.



**End of exercise**

## Exercise review and wrap-up

In the first section of this exercise, you created three user accounts and associated them with one of the default Console groups. Specifically, you created

- 1) the admin2 account as a Console administrator
- 2) the bsmith account as a member of the ALL NODES - Transfer Monitor group
- 3) the sjones account as a member of the 10.0.0.3 - Transfer Administrator group

You also created the acme user, but did not assign a group during the creation of the account.

In the second section of the exercise, you created a new group that is called acme with limited capabilities. Specifically, the acme group was given permission to transfer files only from the Denver node to the Acme node. You then added the acme user account to the Acme group.

# Exercise 4. Creating and managing Console transfers

## Estimated time

00:45

## Overview

This exercise covers the process of creating transfers and managing transfers by using the user accounts created previously.

## Objectives

After completing this exercise, you should be able to:

- Create and run simple transfers
- Define and use smart transfers for automated transfers
- Modify priorities for Console-based transfers
- Use Console to access transfer details
- Monitor transfers on both managed and unmanaged nodes

## Introduction

IBM Aspera Console can be used to initiate transfers between nodes when the Console user has the permission to start transfers. Console provides two types of transfer methods: simple transfers and smart transfers. Simple transfers are one-time transfer sessions that require entering all transfer information. Smart transfers are reusable templates with saved transfer settings.

## Requirements

This exercise requires the Singapore, Denver, and London server in the lab environment.

## 4.1. Creating simple transfers

Simple transfers are ad hoc transfers available for users with the appropriate permissions. You use the `con_admin` account to perform the tasks in this first section.

- \_\_\_ 1. Continue on the Singapore server.
- \_\_\_ 2. Transfer files from the London node to the unmanaged Acme node by using a simple transfer.

The steps in this section demonstrate how transfers can be initiated on a managed node to transfer files to an unmanaged node.

- \_\_\_ a. If Aspera Console is not open, sign in with these credentials:
  - Username: `con_admin`
  - Password: `Passw0rd`
- \_\_\_ b. Click **Transfer**.

- \_\_\_ c. Click **Simple Transfer**.

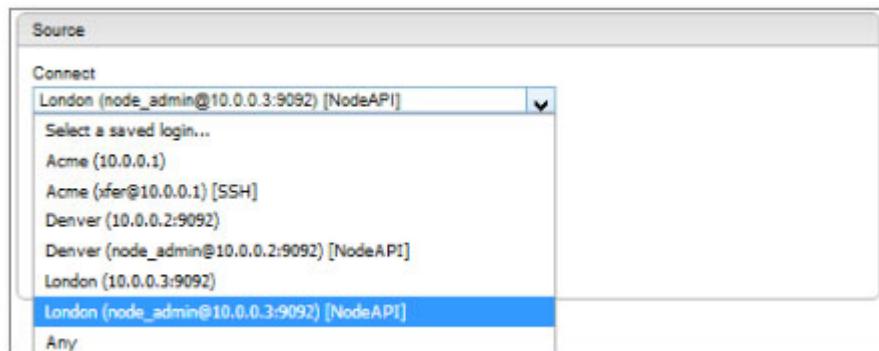
NAME	OWNER	DESCRIPTIVE TAGS	START TYPE	SHARED	ACTIONS

The Start a Simple Transfer page opens.

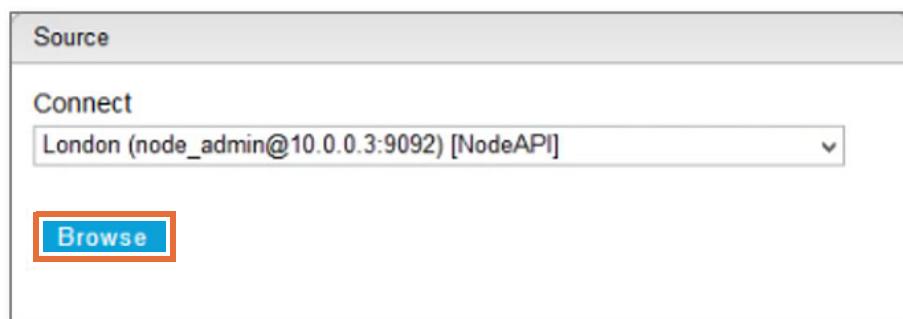
The top section of the page provides a template for defining the source and destination details about the transfer. If the default values are not wanted for the particular transfer, the More Options section defines parameters that can be optionally configured.

\_\_ d. Enter **Test** in the Transfer name field of the Description box.

- \_\_ e. In the Source section, in the Connect menu, select **London (node\_admin@10.0.0.3) [NodeAPI]** endpoint.

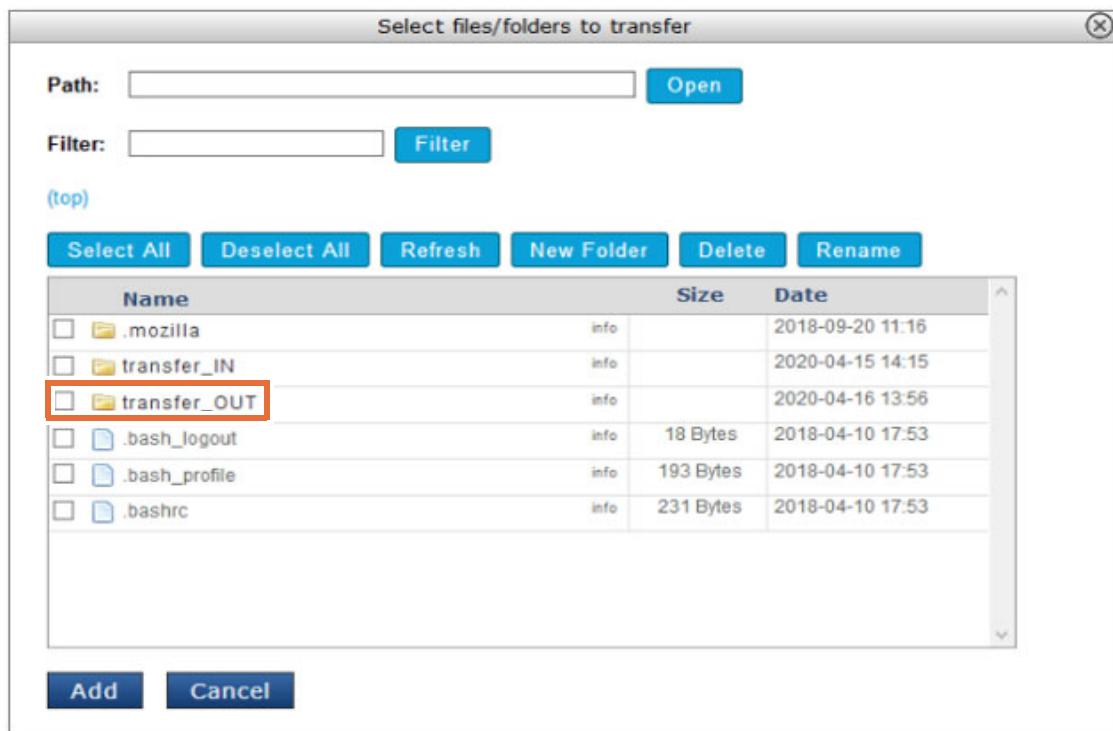


- \_\_ f. Click **Browse** to view files on the London node.



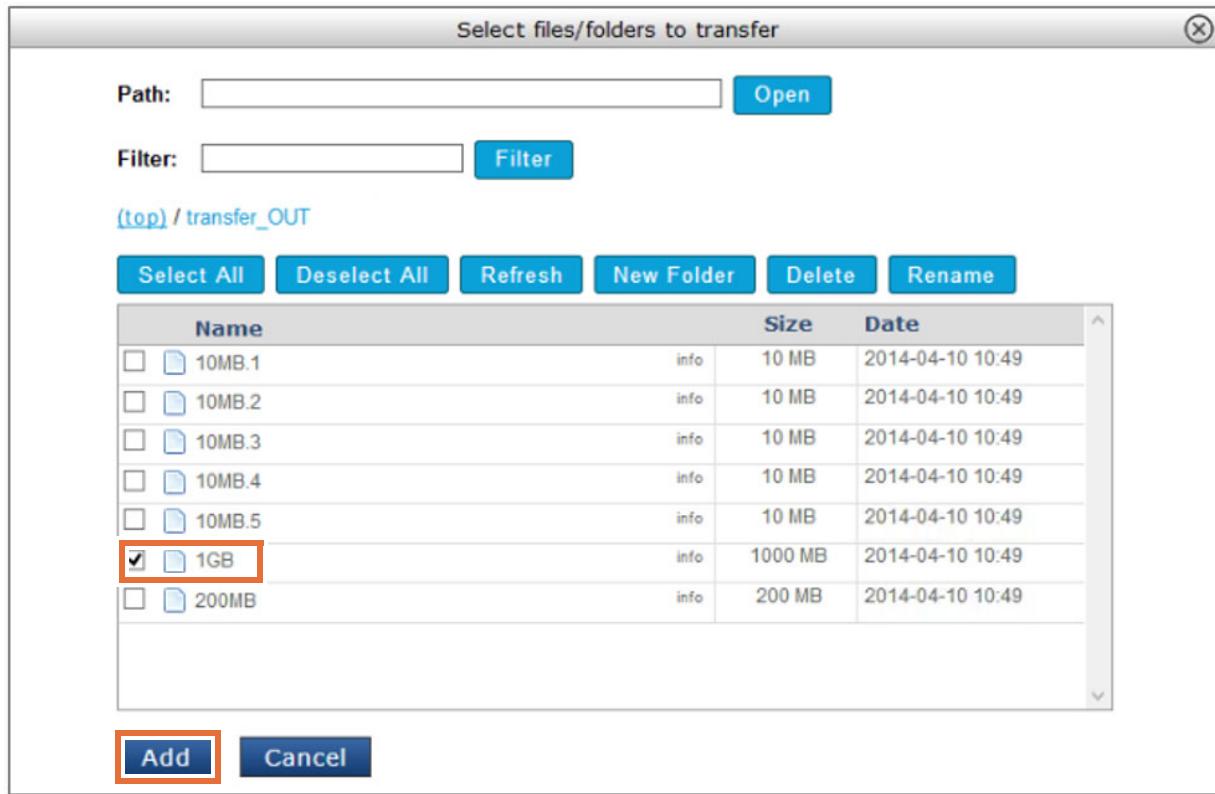
A window appears that lists the files and directories on the London server.

- \_\_ g. Click **transfer\_OUT**.

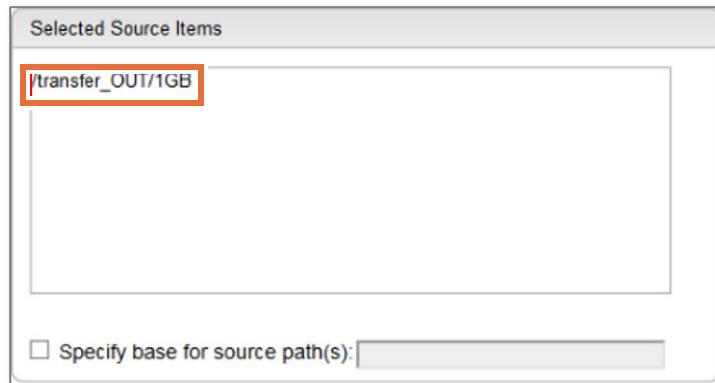


\_\_ h. Select the **1GB** file.

\_\_ i. Click **Add**.



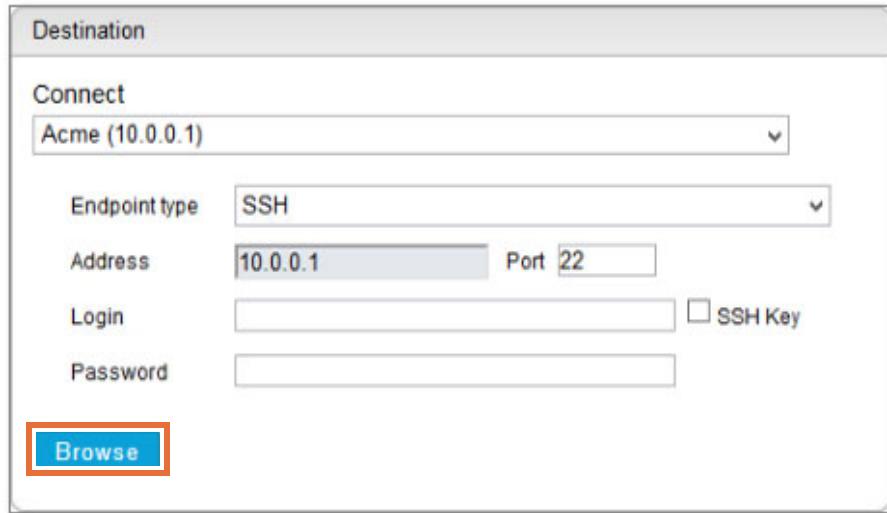
The file that you selected is not immediately transferred, but the name of the file is stored in the **Selected Source Items** box.



The Acme (xfer@10.0.0.1) endpoint is pre-defined with the xfer account credentials. So, when used for the transfer, no login credentials are required. You can optionally select the Acme (10.0.0.1) endpoint (created when the Acme node was added) instead of the Acme@(10.0.0.1)[SSH] endpoint. This option prompts for the login credentials, allowing the initiator to select the login account they need.

\_\_ j. Set the **Destination Connect** value to **Acme (10.0.0.1)**.

- \_\_ k. Enter **user1** in the **Login** field.
- \_\_ l. Enter **passw0rd** in the **Password** field.
- \_\_ m. Click **Browse** to verify that the account is active.

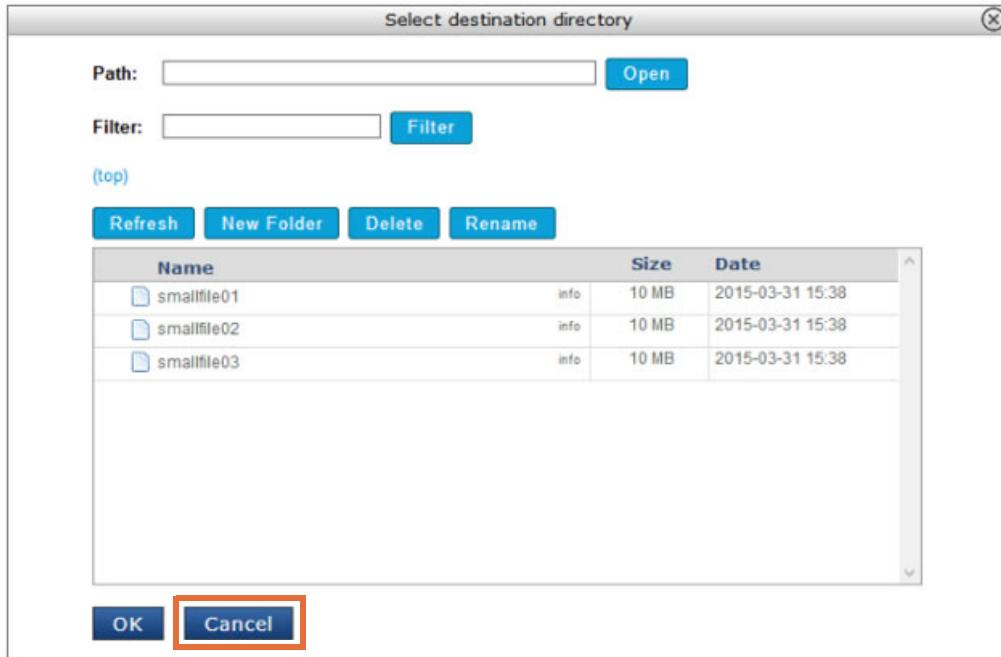


### Reminder

If you receive a message that the connection is refused, check the Windows services to ensure that the OpenSSH service is started.

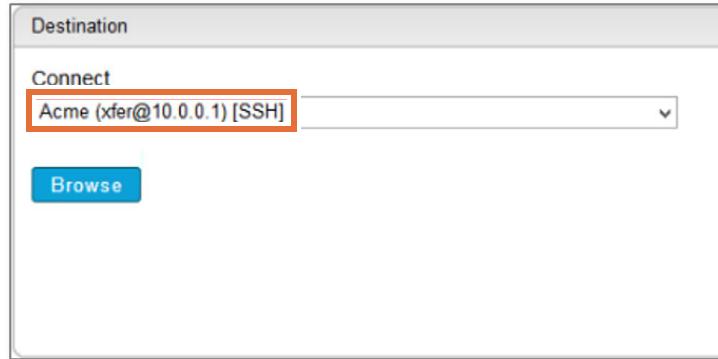
The user1 account's docroot directory is presented which indicates that the account can be accessed.

- \_\_\_ n. Click **Cancel**.



The **Acme (xfer@10.0.0.1) [SSH]** endpoint you created earlier included the credentials for the xfer login account. If that endpoint is selected for the transfer, the pre-defined credentials are used and you are not required to enter the login credentials.

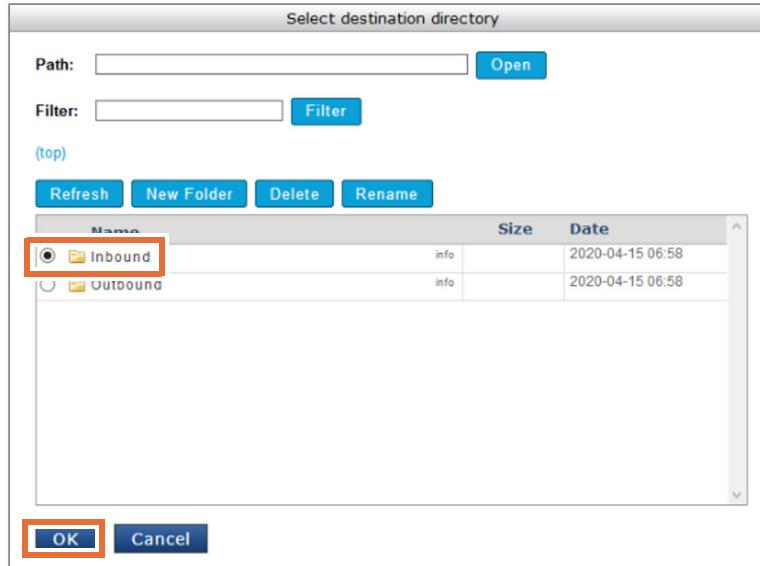
- \_\_\_ o. Change the **Destination Connect** value to **Acme (xfer@10.0.0.1) [SSH]**  
 \_\_\_ p. Click **Browse** to view the directories on the Acme node.



Console opens a listing of the docroot directory on the Acme node.

- \_\_\_ q. Select the **Inbound** directory

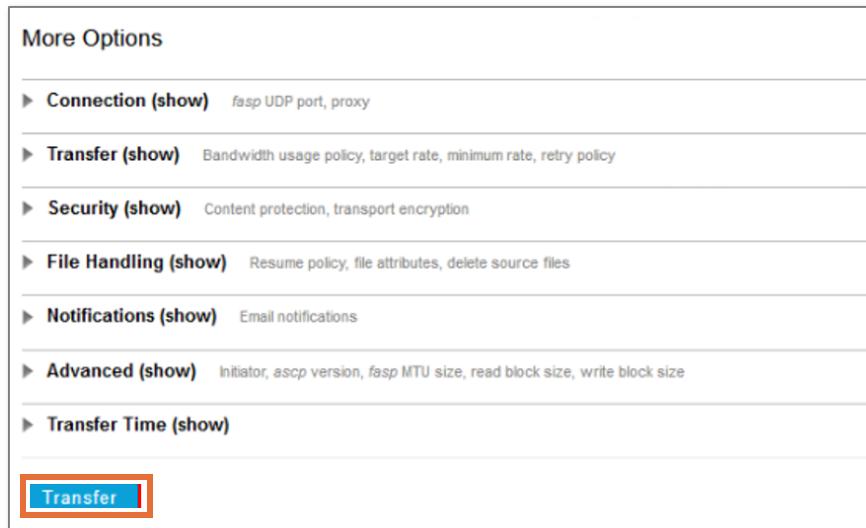
- \_\_\_ r. Click **OK** to set the destination directory.



The **Destination Directory** box now shows **/Inbound** as the destination directory



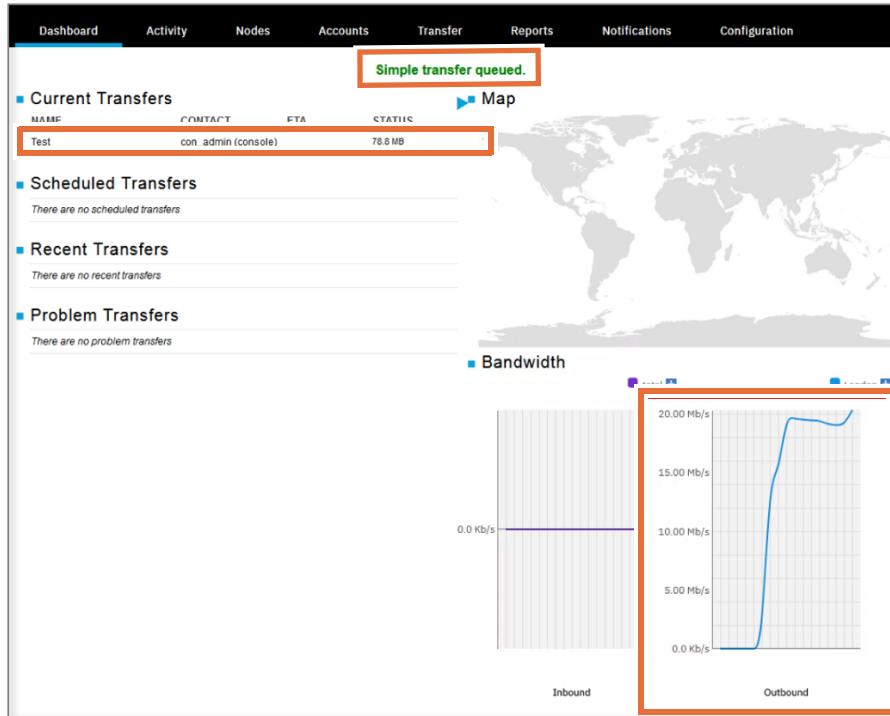
- \_\_\_ s. Click **Transfer** at the bottom of the page



The page changes to the **Dashboard** with a status of **Simple transfer queued** at the top. Within a few seconds the status changes to **Submitted**, then it changes to show the file

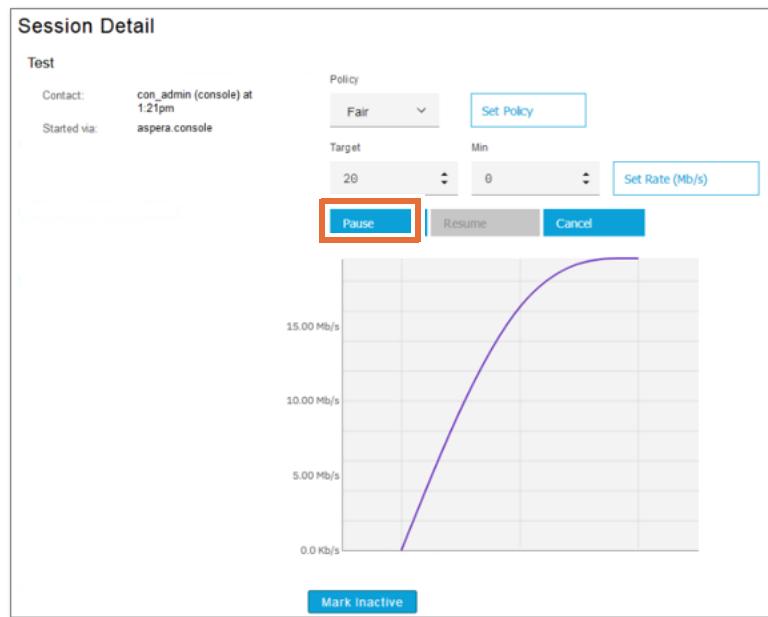
transfer. After the transfer is complete, the Test transfer entry moves from the **Current Transfers** to the **Recent Transfers** section.

1. While the transfer is in progress, double-click anywhere in the Test transfer line under **Current Transfers**.



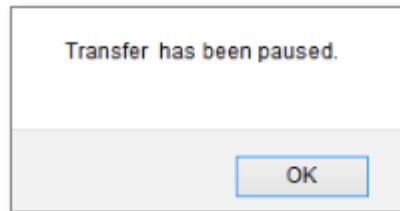
The **Session Detail** screen appears. The top portion of the screen shows graph indicating the transfer rate and fields for Target Rate, Minimum Rate, Transfer policy values. Links are also provided to change the Transfer Policy setting, Pause the transfer, or Cancel the transfer.

— 2. Click **Pause**.



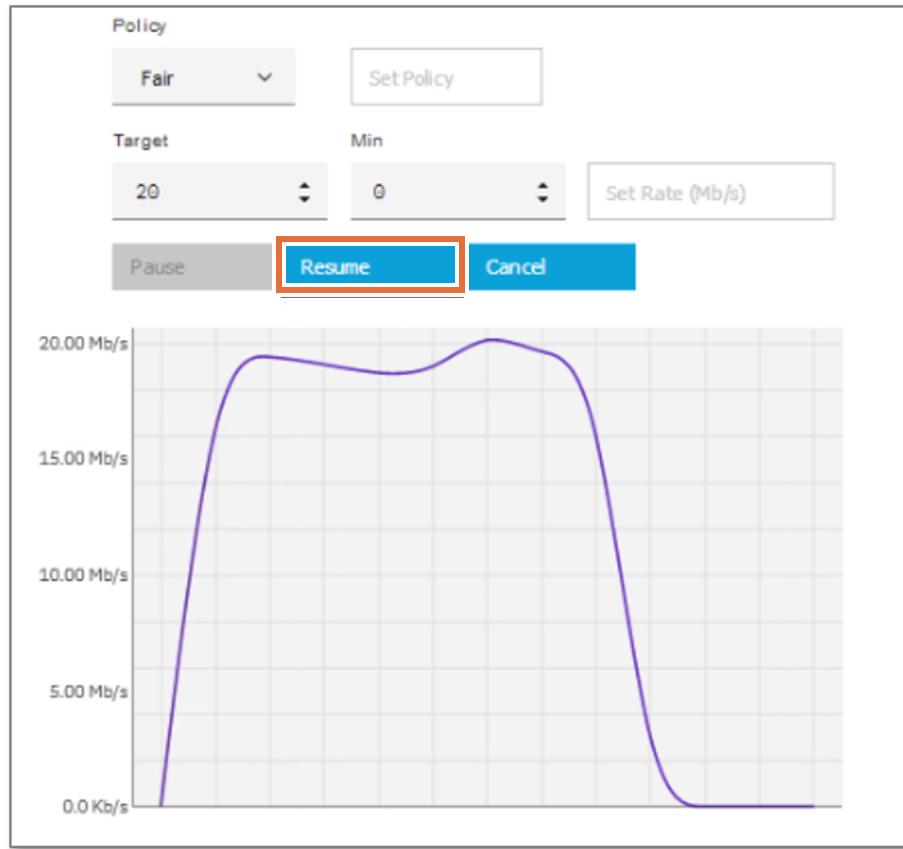
A window appears confirming that the transfer is paused.

— 3. Click **OK**.



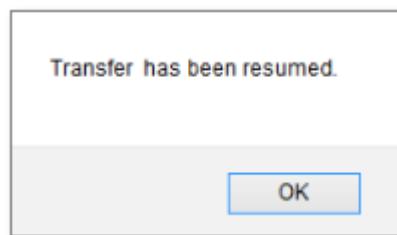
The transfer is paused and the status is reflected in the graph of the transfer rate.

— 4. Click **Resume**.



A window appears that confirms the transfer is resumed.

- 5. Click **OK**.

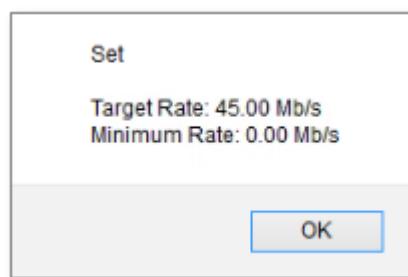


- 6. Modify the **Target Rate** value to be **45** and click **Set Rate (Mbps)**.

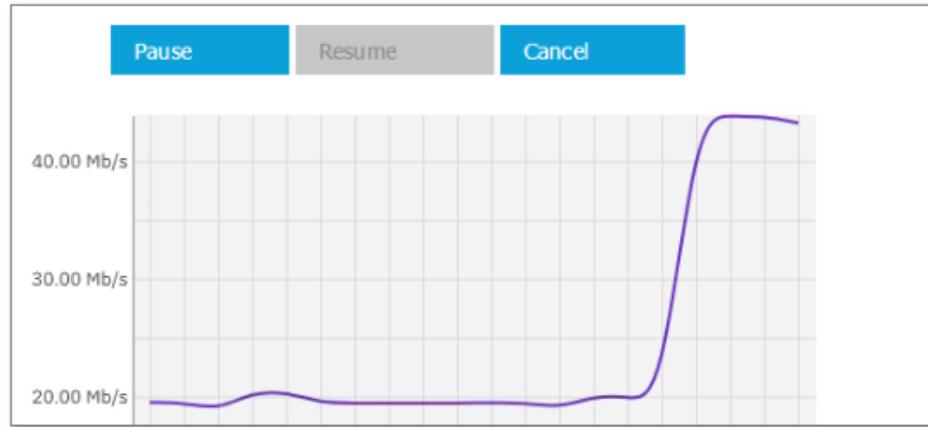


A message is displayed, confirming the changed the Target Rate value.

- 7. Click **OK** to confirm.



The graph changes to indicate that the transfer rate is now in excess of 40 Mbps.



— 8. Click **Dashboard**.

After the transfer completes, the Test transfer record is moved from Current Transfers to Recent Transfers.

You can learn a great deal about a transfer by accessing the Session Detail page, which is what you do in the next few tasks.

## Transfer Details

— 1. Click anywhere on the Test line under **Recent Transfers** to open the **Session Detail** page.

NAME	CONTACT	ENDED	TRANSFERRED
Test	con_admin (console)	6:05am	1000 MB

Because the transfer is no longer active, the details of the transfer are now complete and the Session Detail page no longer shows the transfer rate graphic. The details about the transfer are provided, including a summary of the statistics about the transfer. However, even more detailed information about the transfer is available.

— 2. Click **Session ID** that is displayed under the Session State section to see more information about the transfer.

**Session Detail**

Test

Contact: con\_admin (console) at 7:15am  
Started via: aspera.console

Session State	Endpoints	Statistics
Session status: completed Files: 1 Complete, 0 Failed, 0 Skipped Transport: fasp2 Encryption: None Session ID: <a href="#">efc4d960-d894-4d77-885c-24c03a6313c0</a>	Initiator: Source Source: <a href="#">London</a> (10.0.0.3) Source path(s): /transfer_OUT/1GB Destination: <a href="#">Acme</a> (10.0.0.1) Dest. path: /	Started: 2020-04-14 07:15:41 Stopped: 2020-04-14 07:20:19 Elapsed: 4m 38s Bytes written: 1000 MB Bytes transferred: 1000 MB Average rate: 30.2 Mbps Bytes lost: 1 MB (0.10%) Network delay: 6 ms Notifications: <a href="#">start, success &amp; error</a>

**Session Files**

Search files:   Errors only

[Previous 10 Files](#) [Files 1 - 1](#) [Next 10 Files](#)

NAME	STATUS	STARTED	STOPPED	SIZE
/home/xfer/transfer_OUT/1GB	completed	7:15am	7:20am	1000 MB

[Previous 10 Files](#) [Files 1 - 1](#) [Next 10 Files](#)

The **Session Database Records** page also provides a link to see every database field used during the transfers.

3. Click **Complete field list** to view these database fields

**Session Database Records**

[Back to Session Detail Page](#)

LOGGED FROM	SESSION ID	START	STOP	SEC	BYTES		FILES			ERROR		CODE	DESC	COOKIE	TAGS
					TRANSFERRED	WRITTEN	C	S	F	STATUS					
node_admin:10.0.0.3	<a href="#">efc4d960-d894-4d77-885c-24c03a6313c0</a>	2020-04-14 07:15:41	2020-04-14 07:20:19	(4m 37s)	1,048,576,000 (1000 MB)	1,048,576,000 (1000 MB)	1	0	0	completed			aspera.console:254f71bb-963f-44d7-893a-4d25c7de3782.Test	["aspera": {"xfer_id": "1fc71025-2ecb-4e4d-bc3-97c57f86b194", "xfer_retr": 15}]	

[Complete field list.](#)

4. Click **Transfer**.

**IBM Aspera Console**

Dashboard    Activity    Nodes    Accounts    **Transfer**    Reports    Notifications

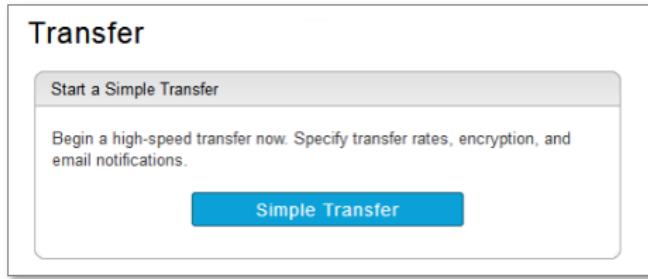
### Session Database Records

[Back to Session Detail Page](#)

LOGGED FROM	SESSION ID	START	STOP	SEC	BYTES		FILES																																																																																				
					TRANSFERRED	WRITTEN	C	S	F																																																																																		
node_admin:10.0.0.3 London (source/initiator)	ef04d96b-da89-4d77-8850-24c03e6313c0	2020-04-14 07:15:41 -0700	2020-04-14 07:20:19 -0700	277 (4m 37s)	1,048,576,000 (1000 MB)	1,048,576,000 (1000 MB)	1	0	0																																																																																		
<table border="1"> <tr> <td>ID</td> <td>240</td> </tr> <tr> <td>LOGGED_FROM</td> <td>node_admin:10.0.0.3</td> </tr> <tr> <td>NODE_UUID</td> <td>881b6105-65f0-4c04-ac9d-ccc841fd93de</td> </tr> <tr> <td>SESSION_ID</td> <td>ef04d96b-da89-4d77-8850-24c03e6313c0</td> </tr> <tr> <td>STATUS</td> <td>completed</td> </tr> <tr> <td>CREATED_AT</td> <td>2020-04-14 07:15:46 -0700</td> </tr> <tr> <td>STARTED_AT</td> <td>2020-04-14 07:15:41 -0700</td> </tr> <tr> <td>STOPPED_AT</td> <td>2020-04-14 07:20:19 -0700</td> </tr> <tr> <td>USER</td> <td>xfer</td> </tr> <tr> <td>COOKIE</td> <td>aspera.console:264f71bb-963f-44d7-893a-4d25c7de3782:Test</td> </tr> <tr> <td>TOKEN</td> <td></td> </tr> <tr> <td>INITIATOR</td> <td>Local</td> </tr> <tr> <td>OPERATION</td> <td>Upload</td> </tr> <tr> <td>SERVER_ADDR</td> <td>10.0.0.1</td> </tr> <tr> <td>SERVER_SSHPORT</td> <td>0</td> </tr> <tr> <td>SERVER_FASPORT</td> <td>0</td> </tr> <tr> <td>CLIENT_ADDR</td> <td></td> </tr> <tr> <td>CLIENT_FASPORT</td> <td>33001</td> </tr> <tr> <td>CIPHER</td> <td>None</td> </tr> <tr> <td>DEST_PATH</td> <td>/</td> </tr> <tr> <td>FILES_COMPLETE</td> <td>1</td> </tr> <tr> <td>FILES_FAILED</td> <td>0</td> </tr> <tr> <td>BYTES_WRITTEN</td> <td>1,048,576,000</td> </tr> <tr> <td>BYTES_TRANSFERRED</td> <td>1,048,576,000</td> </tr> <tr> <td>BYTES_LOST</td> <td>1,095,424</td> </tr> <tr> <td>USECS</td> <td>277,549,518</td> </tr> <tr> <td>TEMP_PREV_USECS</td> <td>275,280,059</td> </tr> <tr> <td>TEMP_PREV_BYTES_TRANSFERRED</td> <td>1,036,696,320</td> </tr> <tr> <td>TEMP_BITRATE</td> <td>43,722,049</td> </tr> <tr> <td>TEMP_BITRATE_CALCULATED_AT</td> <td>2020-04-14 07:20:21 -0700</td> </tr> <tr> <td>NETWORK_DELAY</td> <td>6</td> </tr> <tr> <td>ERR_CODE</td> <td>0</td> </tr> <tr> <td>ERR_DESC</td> <td></td> </tr> <tr> <td>BYTES_PRETRANSFER</td> <td>0</td> </tr> <tr> <td>FILES_PRETRANSFER</td> <td>0</td> </tr> <tr> <td>DIRS_PRETRANSFER</td> <td>0</td> </tr> <tr> <td>PRIORITY</td> <td>normal</td> </tr> <tr> <td>TRANSPORT</td> <td>fasp2</td> </tr> <tr> <td>TEMP_SMOOTHED_BITRATE</td> <td>43,858,786</td> </tr> <tr> <td>TEMP_ETA</td> <td></td> </tr> <tr> <td>SOURCE_PATHS</td> <td>/transfer_OUT/1GB</td> </tr> </table>										ID	240	LOGGED_FROM	node_admin:10.0.0.3	NODE_UUID	881b6105-65f0-4c04-ac9d-ccc841fd93de	SESSION_ID	ef04d96b-da89-4d77-8850-24c03e6313c0	STATUS	completed	CREATED_AT	2020-04-14 07:15:46 -0700	STARTED_AT	2020-04-14 07:15:41 -0700	STOPPED_AT	2020-04-14 07:20:19 -0700	USER	xfer	COOKIE	aspera.console:264f71bb-963f-44d7-893a-4d25c7de3782:Test	TOKEN		INITIATOR	Local	OPERATION	Upload	SERVER_ADDR	10.0.0.1	SERVER_SSHPORT	0	SERVER_FASPORT	0	CLIENT_ADDR		CLIENT_FASPORT	33001	CIPHER	None	DEST_PATH	/	FILES_COMPLETE	1	FILES_FAILED	0	BYTES_WRITTEN	1,048,576,000	BYTES_TRANSFERRED	1,048,576,000	BYTES_LOST	1,095,424	USECS	277,549,518	TEMP_PREV_USECS	275,280,059	TEMP_PREV_BYTES_TRANSFERRED	1,036,696,320	TEMP_BITRATE	43,722,049	TEMP_BITRATE_CALCULATED_AT	2020-04-14 07:20:21 -0700	NETWORK_DELAY	6	ERR_CODE	0	ERR_DESC		BYTES_PRETRANSFER	0	FILES_PRETRANSFER	0	DIRS_PRETRANSFER	0	PRIORITY	normal	TRANSPORT	fasp2	TEMP_SMOOTHED_BITRATE	43,858,786	TEMP_ETA		SOURCE_PATHS	/transfer_OUT/1GB
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SOURCE_PATHS	/transfer_OUT/1GB																																																																																										

The following steps demonstrate how transfers can be initiated from an unmanaged node to a managed node, but scheduled for a later time.

1. Transfer a file from the Acme node to the London node.
  - a. Click **Simple Transfer**.



\_\_ b. Enter the following values in the listed fields:

- Transfer name: **Reverse to London**
- Source Connect: **Acme (xfer@10.0.0.1) [SSH]**
- Selected Source Items: **/Outbound/1GB**
- Destination Connect: **London (node\_admin@10.0.0.3:9092) [NodeAPI]**
- Destination Directory: **/transfer\_IN**



### Note

You can **Browse** to select the source item and destination directory, or you can directly enter the path in the **Selected Source Items** and **Destination Directory** boxes.

\_\_ c. Click the **Transfer Time** link at the bottom of the page.

The screenshot shows the 'Start a Simple Transfer' configuration page. Several fields are highlighted with red boxes:

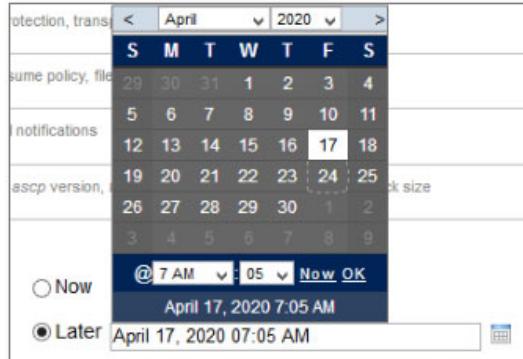
- Transfer name:** /reverse\_to\_London
- Source Connect:** Acme (xfer@10.0.0.1) [SSH]
- Selected Source Items:** /Outbound/1GB
- Destination Connect:** London (node\_admin@10.0.0.3:9092) [NodeAPI]
- Destination Directory:** /transfer\_IN

\_\_ d. Select **Later**.

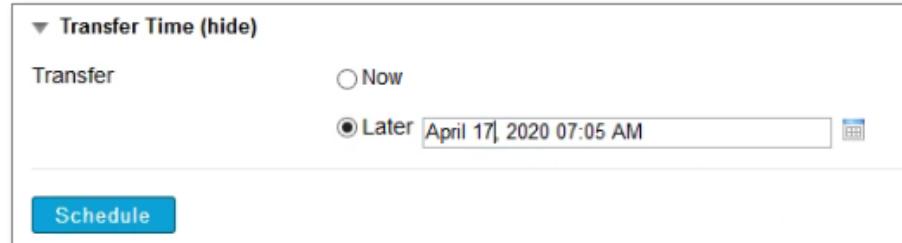
\_\_ e. In the **Later** field, enter a date and time 5 minutes from now using a format like April 17, 2020 07:05 AM

**Note**

If you prefer, you can use the calendar link provided next to the **Later** field to set a date and time instead of manually entering a date and time manually.



Click **Schedule**.



Console changes to the **Dashboard** and shows your transfer under **Scheduled Transfers**.

This screenshot shows the "Scheduled Transfers" section of the dashboard. It lists one transfer named "Reverse to London" with a contact of "con\_admin (console)" and a scheduled start time of "12:20pm". The entire row for this transfer is highlighted with a red box. Below this, there are sections for "Recent Transfers" and "Problem Transfers", both of which are currently empty.

NAME	CONTACT	SCHEDULED START
Reverse to London	con_admin (console)	12:20pm

You can cancel transfers or start scheduled transfers early from the Activity page.

The next steps create another transfer that is scheduled for 1 day in the future.

- \_\_\_ 1. Click **Transfer**.
- \_\_\_ 2. Click **Simple Transfer**.
- \_\_\_ 3. Configure the transfer with these values:
  - Transfer name: **Future transfer**
  - Source Connect: **London (node\_admin@10.0.0.3) [NodeAPI]**
  - Selected Source Items **/transfer\_Out/10MB.5**
  - Destination Connect: **Acme (xfer@10.0.0.1) [SSH]**
  - Destination Directory: **/Inbound**
  - Transfer Time: Set to a time 1 day from now
- \_\_\_ 4. Click **Schedule**.
- \_\_\_ 5. Click **Activity**.
- \_\_\_ 6. Use the menu to select **All** in the **Scheduled** field.

Activity Overview		
Transfers	Sync Jobs	Watchfolders
History: Past hour	Scheduled: <b>All</b>	Status: All
<b>Future</b> NAME DETAILS SCHEDULED Future transfer con_admin (console), London 7:27pm 24-Apr		
advanced... <a href="#">advanced...</a>		

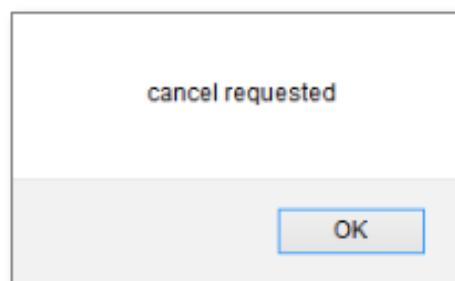
The screen changes to show the scheduled transfers with options that can start the transfer immediately or cancel it

- \_\_\_ 7. In the Future transfer line, click **cancel**

Activity Overview		
Transfers	Sync Jobs	Watchfolders
History: Past hour	Scheduled: All	Status: All
<b>Future</b> NAME DETAILS SCHEDULED ACTION Future transfer con_admin (console), London 7:27pm 24-Apr <b>start</b> <b>cancel</b>		
advanced... <a href="#">advanced...</a>		

A message is displayed that indicates the request to cancel the transfer.

- \_\_\_ 8. Click **OK**.



The transfer is canceled and its record is moved under the **Past** heading.

9. Click **Dashboard**.

**Activity Overview**

Transfers	Sync Jobs	Watchfolders																		
History: Past hour	Scheduled: All	Status: All																		
Search: Transfer Name																				
<a href="#">advanced...</a>																				
<b>Past</b> <table border="1"> <thead> <tr> <th>NAME</th> <th>DETAILS</th> <th>START</th> <th>END</th> <th>STATUS</th> <th>Avg Rate</th> <th>ACTIONS</th> </tr> </thead> <tbody> <tr> <td>Future transfer</td> <td>con_admin (console), London to Acme</td> <td>4:53pm</td> <td>4:53pm</td> <td>Cancelled</td> <td></td> <td><a href="#">rerun</a></td> </tr> </tbody> </table>							NAME	DETAILS	START	END	STATUS	Avg Rate	ACTIONS	Future transfer	con_admin (console), London to Acme	4:53pm	4:53pm	Cancelled		<a href="#">rerun</a>
NAME	DETAILS	START	END	STATUS	Avg Rate	ACTIONS														
Future transfer	con_admin (console), London to Acme	4:53pm	4:53pm	Cancelled		<a href="#">rerun</a>														

The scheduled transfer now appears in the Problem Transfers section and the ERROR section identifies the problem with the transfer.

**Dashboard**    **Activity**    **Nodes**    **Accounts**    **Transfer**    **Reports**    **Notifications**

- Current Transfers**  
There are no current transfers
- Scheduled Transfers**  
There are no scheduled transfers
- Recent Transfers**

NAME	CONTACT	ENDED	TRANSFERRED
Test	con_admin (console)	3:35pm	1000 MB
Test	con_admin (console)	3:20pm	1000 MB
- Problem Transfers**

TRANSFER	CONTACT	TIME	ERROR
Future transfer	con_admin (console)	4:53pm	Cancelled before scheduled start time 2020-04-24 19:27:00 (G...)

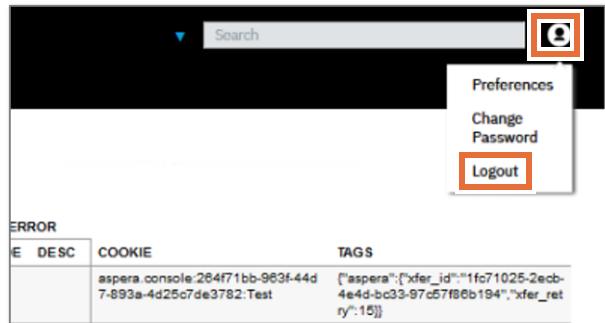
**Map**

**Bandwidth**

The previous steps transferred files between the unmanaged node Acme and a managed node London. The next tasks attempt a similar transfer from Acme to London, but with the acme user account. The acme user account is configured to allow transfers only from the London node to the Acme node.

The next steps transfer files by using a non-administrative user account.

- \_\_\_ 1. Click the profile icon at the upper right of the browser page and select **Logout**.



- \_\_\_ 2. Log in using the **acme** and **aspera** credentials.

A message is displayed stating that the password is expired and prompts to change it.

- \_\_\_ 3. Change the password for the acme user account to **Passw0rd**.

The **Dashboard** is displayed. Notice the reduced number of options for a user that is not an administrator.

A screenshot of the IBM Aspera Console Dashboard for the 'acme' user. The top navigation bar includes 'Dashboard', 'Activity', 'Nodes', 'Transfer' (which is highlighted with a red box), and 'Reports'. A success message 'Password updated successfully.' is displayed above the main content area. On the left, there is a sidebar with sections for 'Current Transfers', 'Scheduled Transfers', 'Recent Transfers', and 'Problem Transfers', each with a note indicating 'There are no [transfer type] transfers'. To the right, there is a world map.

The permissions assigned to the acme user limit the type of transfers that the user can run, so only the Simple Transfers link is available.

- \_\_\_ 4. Click **Transfer**.

A screenshot of the 'Transfer' page. The top navigation bar includes 'Dashboard', 'Activity', 'Nodes', 'Transfer' (which is highlighted with a red box), and 'Reports'. The main content area has a heading 'Transfer' and a sub-section 'Start a Simple Transfer' with a note: 'Begin a high-speed transfer now. Specify transfer rates, encryption, and email notifications.' Below this is a large blue 'Simple Transfer' button. Further down, there is a section for 'Saved Smart Transfers' with a search input field, and a table for managing transfers.

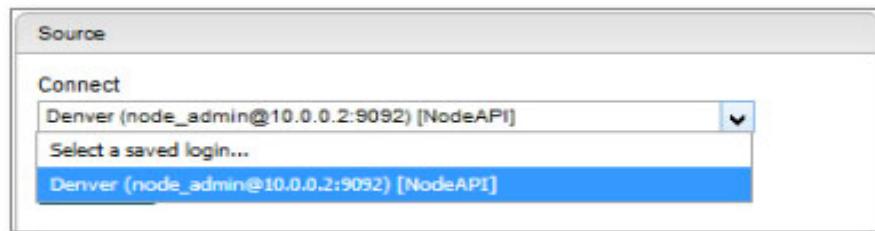
NAME	OWNER	DESCRIPTIVE TAGS	START TYPE	SHARED	ACTIONS

- \_\_\_ 5. Click **Simple Transfer**.
- \_\_\_ 6. Enter **Download** in the Transfer name field.

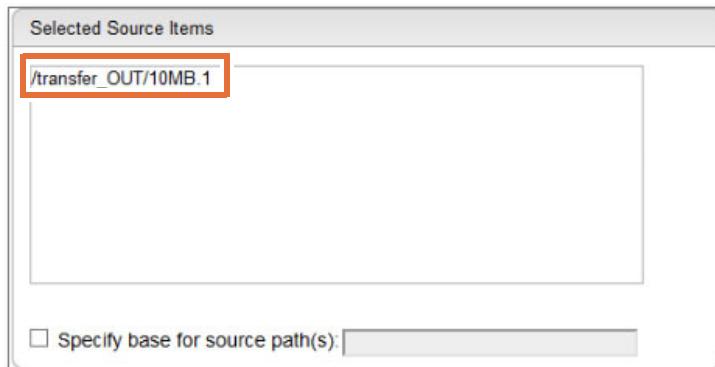
The `to_acme` group that you configured defined a specific connection that allows transfers only from the Denver server to the Acme server. So, the Denver endpoint is the only source available to the acme user.

The London node is not listed as an available connection.

- \_\_\_ 7. Select **Denver (node\_admin@10.0.0.2:9092) [NodeAPI]**.



- \_\_\_ 8. In the Selected Source Items field, enter `/transfer_OUT/10MB.1`.



The choices in the **Destination Connect** field are also limited due to the permissions given to the acme user.

- \_\_\_ 9. In the Destination Connect field, select **Acme (xfer@10.0.0.1) [SSH]**.
- \_\_\_ 10. In the Destination Directory field, enter `/Inbound`.
- \_\_\_ 11. Scroll to the bottom of the page and click **Transfer**.

The screenshot shows the 'Start a Simple Transfer' dialog box. It includes sections for Description, Transfer name (set to 'Download'), Comments, Tags, Source (with a 'Connect' dropdown set to 'Denver (node\_admin@10.0.0.2:9092) [NodeAPI]'), Selected Source Items (listing '/10MB.1'), Destination (with a 'Connect' dropdown set to 'Acme (xfer@10.0.0.1) [SSH]'), and Destination Directory ('/Inbound').

The **Dashboard** confirms that the transfer is queued or is completed (fast transfer of a small file). If the transfer is complete, the Download transfer line appears under **Recent Transfers**,

The dashboard shows a 'Simple transfer queued.' message. Under 'Recent Transfers', there is a table with the following data:

NAME	CONTACT	ENDED	TRANSFERRED
Download	acme (console)	11:17am	10 MB

12. Sign out of Console.



## 4.2. Creating smart transfers

Smart transfers are created once and can be run multiple times. The process of creating a Smart Transfer is similar to the process for creating a simple transfer, but with some differences.

The following steps create a smart transfer between the Acme and Denver nodes that transfers the entire directory when run.

- 1. Log in using the `con_admin` and `Passw0rd_` credentials.
- 2. Click **Transfer**.
- 3. Click **New Smart Transfer**.



The **New Smart Transfer** page appears.

**New Smart Transfer**

**Description**

Transfer name

Share this smart transfer  
 Allow changes to transfer settings at submit time

Tags

**Source**

Connect

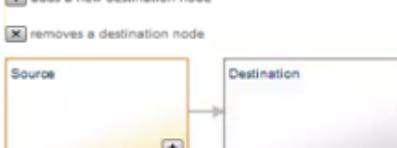
**Choose Source Directory**

Source Path

Specify base for source path(s):

Items to transfer:

**Smart Transfer Diagram**



[+] adds a new destination node  
[+] removes a destination node

More Options (defaults for this smart transfer)

- **Connection (show)** fasp UDP port, proxy
- **Transfer (show)** Bandwidth usage policy, target rate, minimum rate, retry policy
- **Security (show)** Content protection, transport encryption
- **File Handling (show)** Resume policy, file attributes, delete source files
- **Notifications (show)** Email notifications
- **Advanced (show)** Initiator, ascp version, fasp MTU size, read block size, write block size
- **Scheduling (show)**

This smart transfer can be shared with other users of Console.

- \_\_\_ f. Enter **Acme-Denver** in the **Transfer name** field.
- \_\_\_ g. Select **Share this smart transfer**.

**Description**

Transfer name

Share this smart transfer  
 Allow changes to transfer settings at submit time

Tags

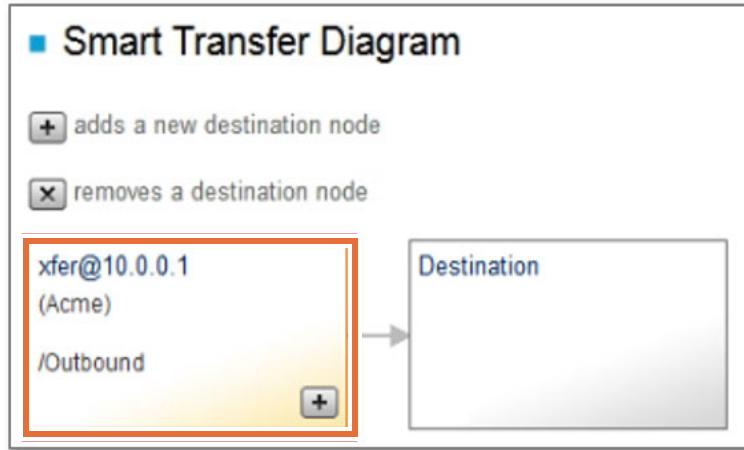
- \_\_\_ h. Use the menu to select **Acme (xfer@10.0.0.1) [SSH]** in the **Source Connect** field.
- \_\_\_ i. Enter **/Outbound** in the **Source Path** field.

**Note**

You can use the **Choose Source Directory** option to select a directory rather than entering it manually.

- \_\_\_ j. Confirm that the **Always transfer the entire directory** value appears in the **Items to transfer** field.

Notice that the Smart Transfer Diagram shows the values that you entered in the **Source** box.



- \_\_\_ k. Click the **Destination** box in the Smart Transfer Diagram to access the **Destination** configuration parameters.  
 \_\_\_ l. Enter **Denver (node\_admin@10.0.0.2) [NodeAPI]** in the **Destination Connect** field.  
 \_\_\_ m. Enter **/transfer\_IN** in the **Destination Path** field..

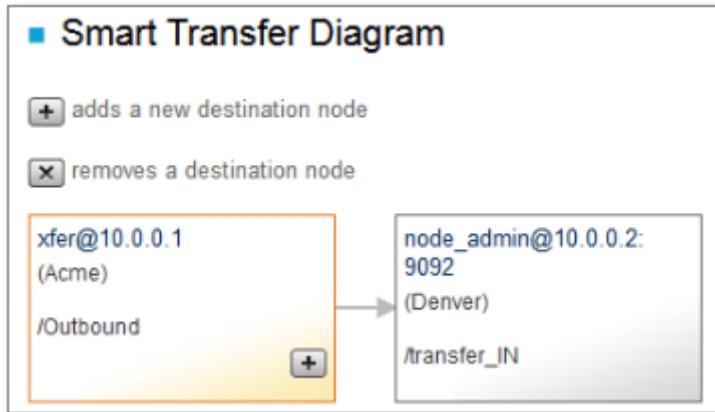
The dialog box is titled "Destination". It contains the following fields:  
 - "Connect": A dropdown menu showing "Denver (node\_admin@10.0.0.2:9092) [NodeAPI]".  
 - "Choose Destination Directory": A blue button.  
 - "Destination Path": An input field containing "/transfer\_IN".  
 - "Allow user to change this destination directory": An unchecked checkbox.  
 - "Allow user to remove this destination": An unchecked checkbox.

Notice that the Smart Transfer Diagram destination box now shows the values that you entered

**Note**

If you enter the text `/transfer_IN` directly into the **Destination Path**, the Smart Transfer Diagram might not reflect your entry. Press **Enter** after entering the text to update the diagram box

- \_\_\_ n. Click **Save**.



Console returns to the **Transfer** page, which shows the transfer you created in the **SavedSmart Transfers** section

- \_\_\_ o. Click **start** under the **ACTIONS** header.

NAME	OWNER	DESCRIPTIVE TAGS	START TYPE	SHARED	ACTIONS
Acme-Denver	con_admin		On request		<b>start</b> edit copy delete

The Start Smart Transfer page appears.

- \_\_\_ p. Click **Start** to begin the transfer.

**Start Smart Transfer**

Description	<p>Transfer name Acme-Denver</p> <p>Comments</p> <p>Tags</p> <p>[+]</p>	<p><b>Smart Transfer Diagram</b></p> <pre> graph LR     A[xfer@10.0.0.1 (Acme) /Outbound] --&gt; B[node_admin@10.0.0.2: 9092 (Denver) /transfer_IN]   </pre>
<p>More Options (defaults for this smart transfer)</p> <ul style="list-style-type: none"> <li>▶ Notifications (show) Email notifications</li> <li>▶ Transfer Time (show)</li> </ul>		
<p><b>Start</b>      <b>Cancel</b></p>		

Console returns to the **Dashboard** and shows the Acme-Denver transfer under the **Current Transfers** heading.

Smart Transfer queued.

<b>Current Transfers</b>				<b>Map</b>
NAME	CONTACT	ETA	STATUS	
Acme-Denver	con_admin (console)		551.8 MB	

In this last transfer, the entire contents of the **/Outbound** directory on the Acme node is transferred to the **/Inbound** directory on the Denver node with no user input required.

## End of exercise

## Exercise review and wrap-up

The first part of the exercise created different simple transfers.

You created and ran a simple transfer from the managed node London to the unmanaged node Acme.

You viewed the details of the session and changed the Target Rate in the middle of the transfer.

You created another simple transfer and scheduled it to run later.

You logged in with the acme user account and discovered that the permissions assigned by the user's group limited the available source and only the Acme node as a destination.

You also canceled a scheduled transfer.

The second part of the exercise created a smart transfer that allowed recurring transfers between the Denver and London servers.

---

# Exercise 5. Configuring and running Console reports

## Estimated time

00:20

Estimated time

00:30

## Overview

This exercise is designed to give you a general understanding of accessing, creating, and running reports from Console.

## Objectives

After completing this exercise, you should be able to:

- Locate and run a basic report
- Configure report parameters
- Create a custom basic report
- Use Console to access transfer details
- Explain how advanced reports can be created

## Introduction

This lab is designed to give you a general understanding of accessing, creating, and running reports from Console. The reports that you generate have little data content, but the purpose is to learn the process of constructing and running reports, not interpreting them.

## Requirements

This exercise uses the Singapore server.

## 5.1. Run a pre-defined basic report

IBM Aspera Console includes numerous basic reports that can be run with no changes. All Aspera Console reports are accessed from the Reports tab.

- \_\_\_ 1. Continue on the Singapore server.

If you need to sign in, use these credentials:

- Username: `con_admin`
- Password: `Passw0rd_`

- \_\_\_ 2. Run a basic report that shows amount of bandwidth that is used by each node each day.

- \_\_\_ a. Click **Reports** to access the **Reports** page.

TIME	NAME	USER	STATUS	ROWS	ACTIONS

- \_\_\_ b. Click **Manage Report Type**.

NAME	CATEGORY	TYPE	OWNER	ACTIONS
Activity Summary By Address	Advanced	Built-in		edit copy run delete
Activity Summary By Contact	Advanced	Built-in		edit copy run delete
Activity Summary By Contact (Faster)	Advanced	Built-in		edit copy run delete
Activity Summary By Contact And Remote Address	Advanced	Built-in		edit copy run delete
Bandwidth Peak Usage Per Node	Advanced	Built-in		edit copy run delete
Bandwidth Peak Usage Per Node Per Day	Advanced	Built-in		edit copy run delete
Bandwidth Usage By Day	Advanced	Built-in		edit copy run delete
Bandwidth Usage By Day By Node	Advanced	Built-in		edit copy run delete
Bandwidth Usage Per Contact Per Time Interval	Advanced	Built-in		edit copy run delete
Bandwidth Usage Per Node Per Time Interval	Advanced	Built-in		edit copy run delete
Billing Report	Advanced	Built-in		edit copy run delete
Billing Summary By Month And Contact	Advanced	Built-in		edit copy run delete
Faspex Activity Summary By Day	Advanced	Built-in		edit copy run delete
Faspex Last Download By Contact	Advanced	Built-in		edit copy run delete
Files By Date	Advanced	Built-in		edit copy run delete
Transfer Sessions By Date With First File	Advanced	Built-in		edit copy run delete
Transfers By Date	Advanced	Built-in		edit copy run delete
Transfers By Date (Prorated)	Advanced	Built-in		edit copy run delete

The **Manage Report Types** page is displayed. This page lists all of the available basic reports. Each report provides links to **copy** or **run** the report. The **edit** and **delete** options appear for each report, but are not available.

You cannot edit a basic report template. If a basic report template needs to be modified for specific needs, you must make a copy of the report and edit the copy.

- \_\_\_ c. Locate the **Bandwidth Usage By Day By Node** report template.
- \_\_\_ d. Click **run** to run the **Bandwidth Usage By Day By Node** report.

Bandwidth Usage By Day	Advanced	Built-in	<a href="#">edit</a> <a href="#">copy</a> <a href="#">run</a> <a href="#">delete</a>
Bandwidth Usage By Day By Node	Advanced	Built-in	<a href="#">edit</a> <a href="#">copy</a> <a href="#">run</a> <a href="#">delete</a>
Bandwidth Usage Per Contact Per Time Interval	Advanced	Built-in	<a href="#">edit</a> <a href="#">copy</a> <a href="#">run</a> <a href="#">delete</a>

The **New Report: Bandwidth Usage By Day By Node** page is presented

The **Title** field shows the assigned title of **Bandwidth Usage by Day by Node**, but it can be modified.

- \_\_\_ e. Change the **Title** to be **My bandwidth report**.
- \_\_\_ f. Reports can be run immediately or scheduled to run later. Leave the default **Run now** marked.
- \_\_\_ g. Set **Report on** to **month to date**.

The values in the **Report Period Start** and **Report Period End** fields change to reflect the value you selected in the **Report on** field.

The **Time zone** field is automatically populated, based on the entries you made when configuring the account that runs the report. However, you can use the menu for this field to change the time zone if wanted.

The default behavior for this report is to include all nodes in the report. However, the **Node Address Match** and **Node Name Match** can be configured to limit the report to include transfers only to or from a specific IP address or node name.

- \_\_\_ h. Leave the **Node Address Match** and **Node Name Match** fields empty.

While not used now, each basic report template includes an optional section to define where to send a copy of the report via email.

- \_\_\_ i. Click **Run Report**.

New Report: Bandwidth Usage By Day By Node

■ Customize Report

Title

■ Scheduling

Run now  Run later

Report Period

Report on

Report Period Start

Report Period End

Time zone

Report Parameters

Node Address Match

Node Name Match

■ Email a Copy of this Report (optional)

Email address

EMAIL ADDRESS	FORMAT
Generate these file formats	
<input type="checkbox"/> XLSX	<input type="checkbox"/> CSV

Console saves the report, runs it, and displays the output. The report is organized by the nodes and provides detailed information, including the number of bytes transferred in and out, the average transfer rates, and the number of errors.

**Note**

The report that is shown here is presented in two sections. Normal format for the reports is in landscape mode.

**Report: My bandwidth report**

As of 2020-04-19 13:12:32 (GMT-08:00) Pacific Time (US & Canada)

04/01/2020 12:00 AM - 04/19/2020 01:12 PM (PDT)

Node Name	Address	Node Type	Start Of Day	End Of Day	Bytes Transferred In	Active Seconds In	Agg Rate In Mbps	Sessions In
Acme	10.0.0.1	UnmanagedNode	2020/04/14 00:00:00	2020/04/15 00:00:00	10,485,780	60	1.40	1
Acme	10.0.0.1	UnmanagedNode	2020/04/16 00:00:00	2020/04/17 00:00:00	2,097,152,000	1,380	12.16	4
Acme	10.0.0.1	UnmanagedNode	2020/04/17 00:00:00	2020/04/18 00:00:00	10,485,780	60	1.40	1
Acme	10.0.0.1	UnmanagedNode	2020/04/19 00:00:00	2020/04/20 00:00:00	1,048,576,000	480	17.48	1
Denver	10.0.0.2	ManagedNode	2020/04/14 00:00:00	2020/04/15 00:00:00	52,428,800	60	6.99	1
Denver	10.0.0.2	ManagedNode	2020/04/17 00:00:00	2020/04/18 00:00:00				
Denver	10.0.0.2	ManagedNode	2020/04/19 00:00:00	2020/04/20 00:00:00	31,457,280	60	4.19	1
London	10.0.0.3	ManagedNode	2020/04/16 00:00:00	2020/04/17 00:00:00				
London	10.0.0.3	ManagedNode	2020/04/19 00:00:00	2020/04/20 00:00:00	1,048,576,000	240	34.95	1

\_\_j. Click **Back to List**.

[Rerun](#)
Back to List

Files Completed In	Errors In	Bytes Transferred Out	Active Seconds Out	Agg Rate Out Mbps	Sessions Out	Files Completed Out	Errors Out
1	0						
2	2						
1	0						
1	0						
5	0	10,485,780	60	1.40	1	1	0
		10,485,780	60	1.40	1	1	0
3	0						
		2,097,152,000	1,380	12.16	4	2	2
1	0	1,048,576,000	480	17.48	1	1	0

The **Scheduled and Recently Run Reports** page lists the report and provides links to rerun or cancel the report. Selecting the **rerun** option opens the configuration page for the report, where you can change the configuration of the report before running it again.

**Reports**

- Scheduled and Recently Run Reports

TIME	NAME	USER	STATUS	ROWS	ACTIONS
1:09pm 04/01/2020 12:00 AM - 04/19/2020 01:05 PM (PDT)	My bandwidth report	con_admin	completed	9	cancel reschedule <b>rerun delete</b>

[Manage Report Types](#)

An alternative way to run a report is to use the **Run a Report** option.

3. Access basic reports from the **Run a Report** link.

- a. Click **Run a Report**.

The **Run a Report** page is presented with a list of basic reports.

- b. Click **Transfers by date**.
  - c. Click **Next**.

**Run a Report**

Choose a report type

Built in	Description
Activity Summary By Address	
Activity Summary By Contact	
Activity Summary By Contact (Faster)	
Activity Summary By Contact And Remote Address	
Bandwidth Peak Usage Per Node	
Bandwidth Peak Usage Per Node Per Day	
Bandwidth Usage By Day	
Bandwidth Usage By Day By Node	
Bandwidth Usage Per Contact Per Time Interval	
Bandwidth Usage Per Node Per Time Interval	
Billing Report	
Billing Summary By Month And Contact	
Faspex Activity Summary By Day	
Faspex Last Download By Contact	
Files By Date	
Transfer Sessions By Date With First File	

**Next**

The **Run a Report** page lists the basic reports and provides a description of each report. Initially, the list shows only the report names. But clicking any report name displays a description of what information that report provides.

- d. Click **Next**.

**Run a Report**

Choose a report type

Activity Summary By Contact	Description
Activity Summary By Contact (Faster)	List of all transfers that overlap the report period.
Activity Summary By Contact And Remote Address	This can include transfers that started before the report period start, as well as ones that ended after the report period end, as long as part of the transfer fell within the reporting period.
Bandwidth Peak Usage Per Node	Data is not prorated: The "bytes transferred", "files complete" and other values shows totals for the entire transfer, even if part of the transfer took place outside the reporting period.
Bandwidth Peak Usage Per Node Per Day	
Bandwidth Usage By Day	
Bandwidth Usage By Day By Node	
Bandwidth Usage Per Contact Per Time Interval	
Bandwidth Usage Per Node Per Time Interval	
Billing Report	
Billing Summary By Month And Contact	
Faspex Activity Summary By Day	
Faspex Last Download By Contact	
Files By Date	
Transfer Sessions By Date With First File	
<b>Transfers By Date</b>	
Transfers By Date (Prorated)	

**Next**

The New Report: Transfers by Date page appears.

- \_\_\_ e. Complete the form with the following values:
  - Select **Run later**
  - Run date: Select today's date
  - Run time: Select a time **5 - 10** minutes \in the future
  - Time zone: Set to your local time zone
  - Report on: Select **last week**
  - Time zone: Set to your local time zone
- \_\_\_ f. Click **Run Report**.

**New Report: Transfers By Date**

■ Customize Report

Title	<input type="text" value="Transfers By Date"/>
-------	--

■ Scheduling

<input type="radio"/> Run now	<input checked="" type="radio"/> Run later
Run date	<input type="text" value="04/19/2020"/> <input type="button" value="..."/>
Run time	<input type="text" value="00 : 00"/> <input type="button" value="..."/>
Time zone	<input type="text" value="(GMT-08:00) Pacific Time (US &amp; Canada)"/> <input type="button" value="..."/>
<input type="checkbox"/> Repeat	

Report Period

Report on	<input type="text" value="last 24 hours"/> <input type="button" value="..."/>
Report Period Start	<input type="text" value="04/18/2020"/> <input type="button" value="..."/>
Report Period End	<input type="text" value="04/19/2020"/> <input type="button" value="..."/>
Time zone	<input type="text" value="(GMT-08:00) Pacific Time (US &amp; Canada)"/> <input type="button" value="..."/>

■ Email a Copy of this Report (optional)

Email address	<input type="text"/>	<input type="button" value="Add"/>
---------------	----------------------	------------------------------------

EMAIL ADDRESS	FORMAT
---------------	--------

Generate these file formats

<input type="checkbox"/> XLSX	<input type="checkbox"/> CSV
-------------------------------	------------------------------

**Run Report**

Because the report is scheduled to run in the future, the report is not immediately run. Console saves the report and reverts to the **Reports** page.

Reports						
Report request saved.						
Scheduled and Recently Run Reports					<a href="#">Manage Report Types</a>	<a href="#">Run a Report</a>
TIME	NAME	USER	STATUS	ROWS	ACTIONS	
8:25pm 04/19/2020	Transfers By Date 04/18/2020 - 04/19/2020 (PDT)	con_admin	scheduled		<a href="#">cancel</a> <a href="#">reschedule</a> <a href="#">rerun</a> <a href="#">delete</a>	
2:50pm 04/01/2020 12:00 AM - 04/19/2020 02:50 PM (PDT)	My bandwidth report	con_admin	completed	9	<a href="#">cancel</a> <a href="#">reschedule</a> <a href="#">rerun</a> <a href="#">delete</a>	

You can use the links that are shown at the right of the report entry to:

- **Cancel** the schedule report (keep the report to be run later)
- **Reschedule** the report for a different date or time
- **Delete** the report

## End of exercise

## Exercise review and wrap-up

This exercise introduced the configuration and execution of basic reports.

You discovered that reports are generated by using the report templates, but stored separately from the templates.

Configured reports can be rerun when needed.

Reports can be configured to run on a regular schedule.



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