

# **Cisco IOx Local Manager Pages and Options**

This chapter provides detailed reference information about the pages and options that are available in Cisco IOx Local Manager.

This chapter includes these sections:

- Cisco IOx Local Manager Tabs, page 2-1
- Applications Page, page 2-2
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- System Setting Page, page 2-5
- System Troubleshoot Page, page 2-7
- Middleware Service Page, page 2-10
- App-ID Page, page 2-11

## **Cisco IOx Local Manager Tabs**

Cisco IOx Local Manager includes the following main tabs in its menu bar. You use these tabs to access the Cisco IOx Local Manager pages:

- **Applications** tab—Displays the Applications page, displays general information about the Cisco IOx apps that have been uploaded to the host system, provides options for managing and administering them, and provides an option for adding a new app.
- **Cartridges** tab—Displays the Cartridges page, which lists the Cisco cartridges that have been installed on the host system, displays general information about these cartridges, and provides options for installing, deleting, and obtaining additional information about them.
- **System Info** tab—Displays the System Info page, which provides hardware, software, network, and resource information that relates to the host system.
- **System Troubleshoot** tab—Displays the System Troubleshoot page, which provides options for reviewing events, errors, and diagnostic information on the host system, and managing and obtaining log files and related information for troubleshooting.
- **System Setting** tab—Displays the System Settings page, which provides information about the range of NAT IP addresses that are reserved for app, and provides options for managing SSL connections and app signature validation

- **Middleware Service** tab—Displays the Middleware Service page, which lists the Cisco Data in ٠ Motion services that are available for apps, displays general information about these services, and provides options for starting, stopping, and uploading licenses for them.
- App-ID tab—When you click the **manage** option on the Applications tab for an app, a tab with the • ID of that app is added to the menu bar. The App-ID tab displays the App-ID page, which provides access to pages for viewing information and performing other activities that relate to a specific app.

To remove an *App-ID* tab from the menu bar, hover your mouse over the tab and click its **Close** button 📃 .

On Cisco IOx Local Manager pages:

- ٠ You can click any field title in a table that displays rows of information to toggle the information in that table in ascending or descending alphabetical order by that field.
- On most pages that display information in multiple areas, you can click an area title to expand or collapse the information in that area

## **Applications Page**

Start button

The Applications page lists the Cisco IOx apps that have been uploaded to the host system, displays general information about these apps, and provides options for managing and administering them.

It also provides buttons for adding an app and refreshing the page

To access the Applications page, choose Applications from the Cisco IOx Local Manager menu bar. Table 2-1 describes the fields and options that are available on this page.

ltem	Description
Uploaded App areas	
Each app that has been uplo items:	aded to the host system displays in an area that includes the following
Name of the app	Displays at the top left of an app area
Description of the app	Displays under the name of the app
Status of the app	Status of the app:
	• <b>DEPLOYED</b> —App is uploaded to the host system. System CPU and RAM resources are not committed to the app. An app with this status can be activated, upgraded, or deleted.
	• ACTIVATED—App is on the host system and ready to run. System CPU and RAM resources have been reserved for the app but are not yet in use. An app with this status can be started or deactivated.
	• <b>RUNNING</b> —App is operating on the host system. System CPU and RAM resources are in use for the app. An app with this status can be stopped.
	• <b>STOPPED</b> —App has been running on the host system but its operation has been stopped. System CPU and RAM resources remain reserved for the app. An app with this state can be started or deactivated.

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ltem	Description
ТҮРЕ	Type of the app ( <b>paas</b> , <b>kvm</b> , <b>lxc</b> , or <b>docker</b> ).
VERSION	Version of the app
PROFILE	Resources profile that is assigned to the app ( <b>default</b> , <b>c1.tiny</b> , <b>c1.small</b> , <b>c1.medium</b> , <b>c1.large</b> , <b>c1.xlarge</b> , or <b>Custom</b> )
Memory bar	For an app that is in DEPLOYED state, blue shading indicates the relative amount of total memory (RAM) resources on a host system that the app requests. For an app that is in ACTIVATED, RUNNING, or STOPPED, state, green shading indicates the relative amount of total memory resources on a host system that is allocated to the app. The percentage value at the right of the bar indicates the percentage of total memory on the host system that is requested by or allocated to the app.
CPU bar	For an app that is in DEPLOYED state, blue shading indicates the relative amount of CPU resources on a host system that the app requests. For an app that is in ACTIVATED, RUNNING, or STOPPED, state, green shading indicates the relative amount of CPU resources on a host system that is allocated to the app. The percentage value at the right of the bar indicates the percentage of total CPU resources on the host system that is requested by or allocated to the app.
Start button	Appears for an app that has a status of ACTIVATED or STOPPED Click to start the app. See the "Starting an App" section on page 3-5
Stop button	Appears for an app that has a status of RUNNING. Click to stop the app. See the "Stopping an App" section on page 3-6.
Activate button	Appears for an app that has a status of DEPLOYED. Click to activate the app. See the "Activating an App" section on page 3-2.
Deactivate button	Appears for an app that has a status of ACTIVATED or STOPPED Click to deactivate the app See the "Deactivating an App" section on page 3-5.
Delete button	Appears for an app that has a status of DEPLOYED. Click to remove the app from the host system. See the "Deleting an App" section on page 3-7.
Manage button	Appears when the app that has any status except DEPLOYED. Click to display the <i>App-ID</i> page for the app. See the "App-ID Page" section on page 2-11.
Upgrade button	Appears for an app that has a status of DEPLOYED. Click to upgrade the app. See the "Upgrading an App" section on page 3-6
Visualization button	Appears for an app is in running state if its descriptor file (package.yaml) file asks for visualization. Click to open a new tab that can show graphs and tables of data that relates to the app. The information that displays depends on what visualization information the app asks for.

Table 2-1	Applications Page Fields and Options (continued)
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Item	Description	
General buttons	General buttons	
The first app that has does not include information for an installed app displays the following buttons:		
Add New button	Uploads the app to the host system and puts the app in DEPLOYED state. See the "Adding/Deploying an App" section on page 3-2.	
Refresh button	Click to update the page with current information.	

Table 2-1Applications Page Fields and Options (continued)
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# **Cartridges Page**

The Cartridges page lists the Cisco cartridges that have been installed on the host system, displays general information about these cartridges, and provides options for installing, deleting, and obtaining additional information about them.

Cartridges are used by PAAS apps. The packages for these apps include only the app logic (such as Python or Java files), but not the Linux operating system files or the root file system that the app requires. Cartridges provide the root file system and Python or Java files that an app requires to run. See the "Cartridge Management Workflows" section on page 3-12 for additional information.

Cartridges are not used by KVM, LXC, or Docker apps.

To access the Cartridges page, choose **Cartridges** from the Cisco IOx Local Manager menu bar. Table 2-2 describes the fields and options that are available on this page.

ltem	Description
Id field	Unique identifier of the cartridge.
Name field	Name of the cartridge.
Actions field	Provides options that you can click to execute operations for the cartridge:
	• <b>Info</b> —Displays a pop-up window that provides detailed information about the cartridge. See the "Viewing Detailed Information about a Cartridge" section on page 3-14.
	• <b>Delete</b> —Removes the cartridge from the host system. See the "Deleting a Cartridge" section on page 3-13.
Description field	Brief description of the cartridge.
Version field	Version of the cartridge.
Install button	Installs the cartridge on the host system. See the "Installing a Cartridge" section on page 3-13.

Table 2-2 Cartridges Page Fields and Options

## **System Info Page**

The System Info page provides hardware, software, network, and resource information that relates to the host system and to the Cisco IOx infrastructure and framework. The information that this page displays is not specific to any particular app.

To access the System Info page, choose **System Info** from the Cisco IOx Local Manager menu bar. Table 2-3 describes the fields and options that are available on this page.

ltem	Description
Refresh Stats button	Click to update the page with current information.
Host Info area	
Information fields	Provides general information about the host system.
Memory area	
Information fields	Provides information about memory use on the host system.
CPU & Processes area	
Information fields	Provides information about CPU and processes that are used on the host system.
Inspect Process button	Click to display a pop-up window that provide additional information about processes that are running on the host system.
Monitoring area	
Corrupted Apps field	If any apps are corrupted on the host system, this field shows the name of each app.
Disk Status field	Displays the status of the hard disk on the host system, if the host system provides this information.
	This information can indicate that disk status is not available, that the last file system consistency check identified errors, or that the file system consistency check cannot recover from disk errors.
IP v4 Routing area	
Information fields	Provides IP v4 routing information that relates to the host system.
DNS and NTP Settings area	1 1
Information fields	Provides domain information for any DNS and NTP servers that the host system is using.
Storage area	
Information fields	Provides information about storage devices that host system is using.
Serial Interfaces area	
Information fields	Provides information about serial interface devices that are available on the host system.
Interfaces area	
Information fields	Provides information about general interfaces that host system is using.

Table 2-3System Info Page Fields and Options

# **System Setting Page**

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The System Setting page provides options for managing internal Cisco IOx networks for apps and managing SSL connections and app signature validation.

Internal Cisco IOx networks allow apps on host systems to communicate with other systems. The network named svcbr\_0 is provided by default, and cannot be deleted. Some host systems allow other networks to be added.

If needed, refer to the app documentation or developer for information network configuration that an app requires when it runs.

To access the System Setting page, choose **System Setting** from the Cisco IOx Local Manager menu bar. Table 2-4 describes the fields and options that are available on this page.

Item Description Additional Networks area Add Network button Click to add an internal network on host systems that support adding internal networks. See the "Adding an Internal Network" section on page 3-16. Interface field Name of the internal Cisco IOx bridge that provides connectivity for this internal network. **Description** field Brief description of the internal network. Physical Interface field Physical interface that the internal network uses for connectivity. Logical Network field Logical networks that provide bridge and NAT networking modes for the internal network. Click a logical network name to display a dialog box that provides detailed information about that logical network. Vlan ID field Identifier of the VLAN on which this internal network operates, if applicable. **IP Mode** field IP mode of the internal Cisco IOx bridge that provides connectivity for this internal network (dhcp, static, or no\_ip\_address). **IP Address** field IP address and subnet mask of the internal Cisco IOx bridge that provides connectivity for this internal network. Actions field Provides these options: edit—Click to edit information that is configured for the network. See the "Editing Information for an Internal Network" section on page 3-18. delete—Click to remove the network. See the "Deleting an Internal Network" section on page 3-18. view—Click to display information that is configured for the network. See the "Viewing Information about an Internal Network" section on page 3-17. SSL/TLS area Import Certificates button Click to import a externally signed SSL certificate to the host system. See the "Configuring an SSL Connection" section on page 3-19.

Table 2-4System Setting Page Fields and Options

ltem	Description
Application Signature Validation	on area
Appears only if the host system s	upports app signing.
<b>Enable Application Signature /</b> <b>Disable Application Signature</b> toggle button	Click the <b>Enable Application Signature</b> button to enable App Package Signature Verification on the host system. When this option is enabled, the Cisco application-hosting framework verifies the signature of an app when the app is installed on the host system If the app signature is not verified, the installation fails.
	Click the <b>Disable Application Signature</b> button to disable App Package Signature Verification on the host system. When this option is disabled, the Cisco application-hosting framework does not verify the signature of an app when the app is installed on the host system.
	See the "Configuring App Signature Validation" section on page 3-20.
Trust Anchor area	
Appears if the host system suppo	rts managing trust anchors.
Import Trust Anchor button	Click to import a trust anchor (a .tar or .tar.gz certificate file) to the host system. Use the Import Trust Anchor dialog box that displays to locate and select the trust anchor that you want, and then click <b>OK</b> .
	If you enabled application signature verification, apps are validated against this certificate when they are added to the host system. If the validation fails, an app does not install.
	See the "Configuring App Signature Validation" section on page 3-20.
<b>Refresh</b> button	If a certificate already exists on the host system, click to display the certificate. If this certificate is the one that you want to use, you do not need to import a certificate. If you import a certificate, it replaces the one that exists on the host system.
List of trust anchors	Displays the checksum value and metadata for each certificate tha you imported.

#### Table 2-4 System Setting Page Fields and Options (continued)

# **System Troubleshoot Page**

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The System Troubleshoot page provides options for reviewing events, errors, and diagnostic information on the host system, and managing and obtaining log files and related information for troubleshooting.

The options on this page are useful for troubleshooting the Cisco IOx framework. For related information, see the following sections:

- Viewing Events, page 3-21,
- Viewing Errors, page 3-22
- Log File Workflows, page 3-23

- Tech Support Information Workflows, page 3-25
- Core Dump File Workflows, page 3-27
- Downloading an App Log File, page 3-10

To access the System Troubleshoot page, choose **System Troubleshoot** from the Cisco IOx Local Manager menu bar. Table 2-5 describes the fields and options that are available on this page.

 Table 2-5
 System Troubleshoot Page Fields and Options

ltem	Description
Events area	
Refresh button	Click to update the fields in the Events area with current information.
	The information in these fields does not update automatically while the System Troubleshoot page is displayed.
Device Uptime field	The amount of time that has passed since the host system last started, shown as days, hours, minutes, and seconds.
CAF Uptime field	The amount of time that has passed since the Cisco application-hosting framework last started on the host system, shown as days, hours, minutes, and seconds.
System Time field	The current date and time on the host system.
Current CAF Stats fields	The following fields provide information about the number of items that have been written to the Cisco application-hosting framework log files since the Cisco application-hosting framework last started on the host system:
	• Warning field—Number of warnings.
	• Error field—Number of errors.
	• <b>Critical</b> field—Number of errors that have a severity of critical.
	• <b>Events</b> field—Number of events. An event typically relates to a successful Cisco application-hosting framework operation.
Search field and button	Lets you display specific Events or Errors in the Events list or Errors list. See the "Viewing Events" section on page 3-21 or the "Viewing Errors" section on page 3-22.
Events button	Click to display the Events list. See the "Viewing Events" section on page 3-21.
Errors button	Click to display the Errors list. See the "Viewing Errors" section on page 3-22.
Events list	Appears when you click the <b>Events</b> button. Displays information about events that have occurred on the host system. An event typically relates to a successful Cisco application-hosting framework operation.
	See the "Viewing Events" section on page 3-21.
Errors list	Appears by default or when you click the <b>Errors</b> button. Displays information about errors that have occurred on the host system and lets you view detailed information about an error.
	See the "Viewing Errors" section on page 3-22.

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ltem	Description
Pagination controls	Let you navigate the Events list or Errors list. See the "Viewing Events" section on page 3-21 or the "Viewing Errors" section on page 3-22.
Logs area	
Refresh button	Click to update the fields in the Logs area with current information.
	The information in these fields does not update automatically while the System Troubleshoot page is displayed.
Logging Management button	Click to configure the type and level of information that the host system captures in its log files. See the "Configuring Log Files" section on page 3-23.
Select Log Type drop-down list	Choose the type of log files that appear in the Log File list. See the "Downloading Log Files" section on page 3-24.
Log File list	Displays information for each log file, according to the log type option that you choose. See the "Downloading Log Files" section on page 3-24.
	You can drag a border between column headings to resize a column.
Diagnostics area	
Diagnostic Type field	Choose the type of diagnostic information to obtain and display. See the "Diagnostic Information Workflow" section on page 3-25.
<b>Detailed Information</b> check box	Check this check box to display detailed diagnostic information in the Display field. See the "Diagnostic Information Workflow" section on page 3-25.
Display field	Displays diagnostic information according to the Diagnostic Type option that you chose. See the "Diagnostic Information Workflow" section on page 3-25.
TechSupport Information area	
Tech Support snapshot file name field	Lists the names of snapshot files that you have generated. A file name has the format tech_support_ <i>timestamp</i> , where <i>timestamp</i> is the host system date and time that the file was generated. See the "Generating a Snapshot File" section on page 3-26.
File Size field	Size of the snapshot file, in bytes.
Download field	Click <b>download</b> to download the corresponding snapshot file to the location of your choice. See the "Downloading a Snapshot File" section on page 3-26.
Delete field	Click the <b>Delete</b> icon <b>X</b> to delete the corresponding snapshot file from the host system. See the "Deleting a Snapshot File" section on page 3-26.
Generate snapshot file button	Click to generate a snapshot file. See the "Generating a Snapshot File" section on page 3-26.
Refresh button	Click to update the list of snapshot files with current information.
Core file name field	Lists the name of core dump files that the system generated.

Table 2-5	System Troubleshoot Page Fields and Options (continued)	)
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ltem	Description
Download field	Click <b>download</b> to download the corresponding core dump file to the location of your choice. See the Downloading a Core Dump File, page 3-27.
Delete field	Click the <b>Delete</b> icon <b>X</b> to delete the corresponding core dump file from the host system. See the Deleting a Core Dump File, page 3-27.
Refresh button	Click to update the list of core dump files with current information.

Table 2-5	System Troubleshoot Page Fields a	and Options (continued)

# **Middleware Service Page**

The Middleware Service page lists the Cisco Data in Motion middleware service that is available for apps, displays general information about this service, and provides options for starting, stopping, and uploading licenses for it. This service runs on the host system.

To access the Middleware Service page, choose **Middleware Service** from the Cisco IOx Local Manager menu bar. Table 2-6 describes the fields and options that are available on this page.

ltem	Description
Name field	Name of the Cisco Data in Motion service.
Status field	Status of the Cisco Data in Motion service:
	• <b>Running</b> —Service is running on the host system
	• <b>Stopped</b> —Service is not running on the host system
Actions field	Provides options that you can click to execute operations for the Cisco Data in Motion service. Options that appear depend on the status of the service as follows:
	• <b>start</b> —Click to start a service that has a status of Stopped. See the "Starting a Cisco Data in Motion Service" section on page 3-15.
	• <b>stop</b> —Click to stop a service that has a status of Running. See the "Stopping a Cisco Data in Motion Service" section on page 3-16.
	• <b>license</b> —Click to upload a Data in Motion license to the host system. See the "Uploading a Cisco Data in Motion License" section on page 3-14.
Description field	Description of the Cisco Data in Motion service.
Version field	Version of the Cisco Data in Motion service.
Require License field	Indicates whether a license is required for the Cisco Data in Motion service to operate on the host system.
Refresh button	Click to update the page with current information.

 Table 2-6
 Middleware Service Page Fields and Options

## **App-ID** Page

The *App-ID* page, where *App-ID* is the ID of an app, includes the following tabs. These tabs provide access to pages for viewing information and performing other activities that relate to a specific app.

- **Resources** tab—Displays the Resources page, from which you can assign various resources to an app, activate an app, and deactivate an app. See the "App-ID > Resources Page" section on page 2-11.
- **App-info** tab—Displays the App-info page, from which you can view system and network information that relates to an app. See the "App-ID > App-info Page" section on page 2-14.
- **App-Config** tab—Displays the App-Config page, from which you can update configuration information for an app. See the "App-ID > App-Config Page" section on page 2-16.
- **App-DataDir** tab—Displays the App-DataDir page, from which you can see the contents of the /data directory in an app container, upload files to the /data directory or subdirectory, download files to your local system, and delete files or subdirectories from the /data directory. The files can be configuration files or other files that the app needs when it runs. See the "App-ID > App-DataDir Page" section on page 2-16.
- Logs tab—Displays the Logs page, from which you can view information about and download app log files. See the "App-ID > Logs Page" section on page 2-17.

To access the *App-ID* page, choose the *App-ID* tab for the app from the Cisco IOx Local Manager menu bar.

If you do not see the tab for an app, choose the **Applications** tab, and then click the **manage** option for the app that you want.

To remove an *App-ID* tab from the menu bar by, hover your mouse over the tab and click its **Close** button .

### *App-ID* > Resources Page

The App-ID > Resources page lets you assign a resource profile (host system CPU and memory resources) to an app, designate the network from which the app obtains its IP address, and activate or deactivate an app. This page also shows CPU and memory resources that are available on the host system.

If needed, refer to the app documentation or developer for information regarding resources that an app requires when it runs.

To access the *App-ID* > Resources page, choose an *App-ID* tab from the Cisco IOx Local Manager menu bar, and then choose **Resources**. Table 2-7 describes the fields and options that are available on this page.

ltem	Description
<b>Resources</b> title	Click to expand or collapse this page.

Table 2-7 App-ID > Resources Page Fields and Options

ltem	Description
<b>Resource Profile area</b>	· ·
Profile drop-down list	Provides options for designating the <i>resource profile</i> for an app. A resource profile designates the amount of host system CPU and memory (RAM) resources that the app requires to run, as follows.
	• <b>default</b> —Assigns CPU and memory resources based on the requirement that is specified in the metadata for the app.
	• <b>c1.tiny</b> , <b>c1.small</b> , <b>c1.medium</b> , <b>c1.large</b> , or <b>c1.xlarge</b> —Assigns the CPU and memory resources that the options display. These values are based on the host system hardware.
	• <b>Custom</b> —Lets you enter your own CPU, RAM, and disk space values in the CPU, Memory, and Disk fields
	See the "Activating an App" section on page 3-2 for more information.
CPU field	Number of CPU units that the app requires on the host system.
	If you choose <b>Custom</b> from the <b>Profile</b> drop-down list, enter a value in this field. If you choose another option, the system enters a value in this field for you.
Memory field	Amount of RAM, in MB, that the app requires on the host system.
	If you choose <b>Custom</b> from the <b>Profile</b> drop-down list, enter a value in this field. If you choose another option, the system enters a value in this field for you.
Disk field	Amount of disk space, in MB, that the app requires on the host system.
	You can enter a value in this field for any option that you choose from the <b>Profile</b> drop-down list. The value that you enter must be greater than the existing value; you cannot decrease the disk space value.
Vcpu field	Appears only for VM-based apps. Enter the number of virtual CPUs that the app requires on the system.
	If you choose <b>Custom</b> from the <b>Profile</b> drop-down list, enter a value in this field. If you choose another option, the system enters a value in this field for you.
Avail. CPU field	Number of available CPU units on the host system.
	The system does not allow you to activate an app if the value in the <b>CPU</b> field exceeds this available CPU value.
Avail. Memory field	Amount of available RAM, in MB, on the host system.
	The system does not allow you to activate an app if the value in the <b>Memory</b> field exceeds this available memory value.
Max VCPU/App field	Appears only for VM-based apps. Number of virtual CPUs that are available on the host system.

 Table 2-7
 App-ID > Resources Page Fields and Options (continued)

ltem	Description
Network Configuration area	
Network Name drop-down list	Designates the network from which the app obtains its IP address or addresses:
	• <b>iox-bridge0</b> —App obtains its IP address from a DCHP pool that is configured in Cisco IOS
	• <b>ioxnat0</b> —App obtains its IP address from an internal network address translator
Port Mapping link	Click to configure mapping of external ports to internal ports for an app. See Step 9 in the "Activating an App" section on page 3-2.

Table 2-7	App-ID > Resources Page Fields and Options (continued)

#### Serial Access Configuration area

Appears only if the app metadata requests that a serial port on the host system be assigned for use by the app.

<i>Port_description</i> radio button	Identifies one or more serial ports on the host system that the app metadata requests for use by the app. <i>Port_description</i> is a description of the port usage that comes from the app metadata.
	Click the radio button for each port that you want to assign for use by the app.
Activate / Deactivate toggle button	Click to activate or deactivate an app. See the "Activating an App" section on page 3-2 and the "Deactivating an App" section on page 3-5.
debug mode check box	Appears only for Docker and PAAS type apps. Check this check box to activate the app in debug mode.
	If an app that is running in debug mode shuts down unexpectedly, the app does not go to STOPPED state. Instead, the app remains in RUNNING state so that you can use an SSH client to access the app and troubleshoot.
	If you want to enable or disable the debug mode of an app that has been activated, you must first deactivate the app.

#### **USB** Configuration area

Appears only if the host system can provide this information and if the app metadata requests that a USB port on the host system be assigned for use by the app.

<i>Port_description</i> radio button	Identifies one or more USB ports on the host system that the app metadata requests for use by the app. <i>Port_description</i> is a description of the port usage that comes from the app metadata.
	Click the radio button for each port that you want to assign for use by the app.

#### **VNC Password area**

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Appears only if the host system supports this functionality.

Password field	Enter a password for accessing an app via a VNC session.
	Use this password in the VNC client that you use to access the app.

### *App-ID* > App-info Page

The App-ID > App-info page displays system, resource, and network information that relates to an app. It also provides information that you can use to access an app via a console. Much of the information on this page comes from the app metadata.

To access the *App-ID* > App-info page, choose an *App-ID* tab from the Cisco IOx Local Manager menu bar, and then choose **App-info**. Table 2-8 describes the fields and options that are available on this page. Some of the fields on this page appear only when an app is in a specific state or has a specific configuration.

ltem	Description
Application Information are	a
ID field	ID of the app
State field	Current state of the app (for example, DEPLOYED).
Name field	Name of the app.
Cartridge Required field	For PAAS applications, the name of each cartridge that the app requires. See the "Cartridge Management Workflows" section on page 3-12.
Version field	Version of the app.
Author field	Author of the app (for example, the company that provided the app).
Author link field	Link to an external page for the author (for example, the website of the author).
Application Type field	Type of the app (PAAS or MV).
Description field	Brief description of the app.
Toolkit service field	Not used.
Debug mode field	If the app was activated in debug mode, this field shows <b>true</b> . Otherwise, this field shows <b>false</b> .
App Access area	
Console Access	For an app that has a status of RUNNING, displays the command that you can use to access the app via a console. See the "Accessing an App via a Console" section on page 3-9.
VNC Access field	For a VM-based app that has a status of RUNNING, displays the password that you entered in <b>Password</b> field the <i>App-id</i> > Resources page for accessing an app via a VNC session.
Requested Resource area	
CPU field	Number of CPU units that the app consumes on the host system.
Memory field	RAM, in MB, that the app consumes on the host system.
Profile field	Resource profile that you assigned to the app. See the "Activating an App" section on page 3-2.
Disk field	Disk space, in MB, that the app consumes on the host system.
Vcpu field	Number of virtual CPUs that are available on the host system for a VM-based app.

Table 2-8App-ID > App-info Page Fields and Options

Γ

ltem	Description
Network Information area	
interface-name field	Name of the network interfaces that the app uses for network access. Click an interface name to display a dialog box that shows the following information, as available:
	• interface-name—Name of the network interface that the app uses for network access.
	• TCP—If the app metadata requests that TCP ports be open on the host system, displays the TCP port number or numbers that the app requests be open for its use. If <b>info</b> appears in this field, click <b>info</b> to display a dialog box that provides port mapping information for this network interface.
	• UDP—If the app metadata requests that UDP ports be open on the host system, displays the TCP port number or numbers that the app requests be open for its use. If <b>info</b> appears in this field, click <b>info</b> to display a dialog box that provides port mapping information for this network interface.
	• mac_address—MAC address of the network interface that the app uses for network access.
	• network_name—Name of the network on which the app is activated.
	• ipv4—IPv4 address that is assigned to the internal interface of the app.
	• ipv6—IPv6 address that is assigned to the internal interface of the app.
Device Information area	
Sl.No field	Row number in this area number for the corresponding information.
usage field	Description of the USB or serial device that the app uses on the host system.
device-id field	Unique ID used by the host system to identify the USB or serial device that the app uses.
type field	Indicates the type of device (serial or usbport).
label field	ID used by the app to identify the USB or serial device that the app uses on the host system.
App Health area	
App Health field	Description of the health of the app. "Healthy" means that the app has no errors and is operating normally. "Unhealthy" means that the app has errors. Click a description to see more detailed information, if available.
Reconcile Attempted field	If Cisco IOx determined that the app was corrupted and tried to recover the app, this field shows <b>true</b> . Otherwise, this field shows <b>false</b> .

 Table 2-8
 App-ID > App-info Page Fields and Options (continued)

ltem	Description
Reconcile Failure field	If Cisco IOx tried to recover the app but was not able to, this field shows <b>true</b> . Otherwise, this field shows <b>false</b> .
	If this field shows <b>true</b> , the app must be recovered manually.
Resource Usage area	
CPU field	Percentage of total CPU units on the host system that the app is currently consuming.
Memory field	Memory, in KB, that the app is currently consuming on the host system.
Disk field	Disk space, in MB, that the app is currently consuming on the host system.
Network field	Data, in bytes, that the app has received from and transferred to the host system.
Refresh button	Click to update the page with current information.

Table 2-8 App-ID > App-info Page Fields and Options (continued)

#### *App-ID* > App-Config Page

The *App-ID* > App-Config page from lets you update the configuration file for an app.

An app configuration file is a text file named package\_config.ini, which is stored in the /data directory in the app container for the app. When an app starts, it obtains configuration parameters from this file, if the file exists. The contents and use of this file by its app are defined by the app developer.

To access the App-ID > App-Config page, choose an App-ID tab from the Cisco IOx Local Manager menu bar, and then choose **App-Config**. Table 2-9 describes the fields and options that are available on this page.

Table 2-9App-ID > App-Config Page Fields and Options

ltem	Description
Text field	Lets you enter configuration information for the app. See the "Updating an App Configuration file" section on page 3-8.
Save button	Click to save the updates that you made in the <b>Text</b> field.

### *App-ID* > App-DataDir Page

The App-ID > App-DataDir page lets you see the contents of the /data directory in an app container, upload files to the /data directory or subdirectory, download files to your local system, and delete files or subdirectories from the /data directory. The files can be configuration files or other files that the app needs when it runs. log files, and other files that are created while app is running.

To access this page, the app must be in the ACTIVATED, RUNNING, or STOPPED state. This page is not available for use when an app is in the DEPLOYED state.

To access the App-ID > App-DataDir page, choose an App-ID tab from the Cisco IOx Local Manager menu bar, and then choose **App-DataDir**. Table 2-10 describes the fields and options that are available on this page.

ltem	Description
Current Location	Location in the app container /data directory of a folder that you clicked in the Name field.
Name field	Displays the files and subdirectories in the app container /data directory. In this field, you can take the following actions:
	• If you are viewing a subdirectory, click/ to display the contents of the directory that is one level up from the directory that you are viewing.
	• Click the <b>Home</b> button to the contents of the top level of the /data directory.
	• Click a subdirectory name to see its contents.
	• Click a file name to download the file to your local PC. See the "Downloading a File from an App Data Directory" section on page 3-11.
Type field	Indicates the type of the corresponding item:
	• file—Item is a file in the /data directory or a subdirectory
	• <b>dir</b> —Item is a subdirectory in the /data directory
Size field	Size of a file, in bytes. For directories, the size displays as 0.
Actions field	Provides the <b>delete</b> option for deleting a file or directory. See the "Deleting a File or Directory from an App Data Directory" section on page 3-12.
Home button	Click to display in the Name field the contents of the top level of the /data directory.

Table 2-10	App-ID > App-DataDir Page Fields and Options
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### App-ID > Logs Page

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The App-ID > Logs page provides information about the app log files that the app creates in the /data/logs directory in the app container for the app, and lets you download these log files.

To access the App-ID > Logs page, choose an App-ID tab from the Cisco IOx Local Manager menu bar, and then choose **Logs**. Table 2-11 describes the fields and options that are available on this page.

Table 2-11App-ID > Logs Page Fields and Options

ltem	Description
Log name field	Name of the log file.
Timestamp field	Host system date and time that the log file was last updated.
Log Size field	Size of the log file, in bytes.
download button	Lets you download a log file. See the "Downloading an App Log File" section on page 3-10.