

# HP Operations Orchestration Software

Software Version: 9.00

## *HP NonStop Content Version 1.0 Integration Guide*

Document Release Date: June 2010

Software Release Date: June 2010



## Legal Notices

### Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

### Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

### Copyright Notices

© Copyright 2010 Hewlett-Packard Development Company, L.P.

### Trademark Notices

For information on open-source and third-party software acknowledgements, see in the documentation set for this release, Open-Source and Third-Party Software Acknowledgements (3rdPartyOpenNotices.pdf)

# On the Web: Finding OO support and documentation

There are two Web sites where you can find support and documentation, including updates to OO Help systems, guides, and tutorials:

- The OO Support site
- BSA Essentials Network

## Support

Documentation enhancements are a continual project at Hewlett-Packard Software. You can obtain or update the HP OO documentation set and tutorials at any time from the HP Software Product Manuals Web site. You will need an HP Passport to log in to the Web site.

### To obtain HP OO documentation and tutorials

1. Go to the HP Software Product Manuals Web site (<http://support.openview.hp.com/selfsolve/manuals>).
2. Log in with your HP Passport user name and password.

OR

If you do not have an HP Passport, click **New users – please register** to create an HP Passport, then return to this page and log in.

If you need help getting an HP Passport, see your HP OO contact.

3. In the **Product** list box, scroll down to and select **Operations Orchestration**.
4. In the **Product Version** list, click the version of the manuals that you're interested in.
5. In the **Operating System** list, click the relevant operating system.
6. Click the **Search** button.
7. In the **Results** list, click the link for the file that you want.

## BSA Essentials Network

For support information, including patches, troubleshooting aids, support contract management, product manuals and more, visit the following site: <http://www.hp.com/go/bsaessentialsnetwork>

This is the **BSA Essentials Network** Web page. To sign in:

1. Click **Login Now**.
2. On the **HP Passport sign-in** page, enter your HP Passport user ID and password and then click **Sign-in**.
3. If you do not already have an HP Passport account, do the following:
  - a. On the **HP Passport sign-in** page, click **New user registration**.
  - b. On the **HP Passport new user registration** page, enter the required information and then click **Continue**.
  - c. On the confirmation page that opens, check your information and then click **Register**.
  - d. On the **Terms of Service** page, read the Terms of use and legal restrictions, select the **Agree** button, and then click **Submit**.
4. On the **BSA Essentials Network** page, click **Operations Orchestration Community**.

**The Operations Orchestration Community** page contains links to announcements, discussions, downloads, documentation, help, and support.

**Note:** Contact your OO contact if you have any difficulties with this process.

## In OO: How to find Help, PDFs, and tutorials

The HP Operations Orchestration software (HP OO) documentation set is made up of the following:

- Help for Central

Central Help provides information to the following:

- Finding and running flows
- For HP OO administrators, configuring the functioning of HP OO
- Generating and viewing the information available from the outcomes of flow runs

The Central Help system is also available as a PDF document in the HP OO home directory, in the \Central\docs subdirectory.

- Help for Studio

Studio Help instructs flow authors at varying levels of programming ability.

The Studio Help system is also available as a PDF document in the HP OO home directory, in the \Studio\docs subdirectory.

- Animated tutorials for Central and Studio

HP OO tutorials can each be completed in less than half an hour and provide basic instruction on the following:

- In Central, finding, running, and viewing information from flows
- In Studio, modifying flows

The tutorials are available in the Central and Studio subdirectories of the HP OO home directory.

- Self-documentation for operations and flows in the Accelerator Packs and ITIL folders

Self-documentation is available in the descriptions of the operations and steps that are included in the flows.

# Table of Contents

Warranty .....	ii
Restricted Rights Legend .....	ii
Trademark Notices .....	ii
On the Web: Finding OO support and documentation .....	iii
Support .....	iii
BSA Essentials Network .....	iii
In OO: How to find Help, PDFs, and tutorials .....	iv
Overview of NonStop Content integration .....	1
Use cases and scenarios .....	1
Installation and configuration instructions .....	4
Installing NonStop OO Content version 1.0 using the BSA Essentials Live Network .....	4
Installing NonStop OO Content version 1.0 manually .....	5
Versions .....	5
NonStop Content integration operation and flow infrastructure .....	5
Common inputs in the integration .....	7
Operation and flow specifics .....	8
Information gathering flows .....	8
Display All Ethernet Interface Status flow .....	8
Display All Provider Status flow .....	9
Display CPU Metrics flow .....	9
Display CPU Utilization flow .....	9
Display Disk Volume Metrics flow .....	9
Display Disk Volume Usage flow .....	10
Display Disk Volumes and How Full flow .....	10

Display Free Memory flow.....	10
Display Last Boot Time flow .....	10
Display Looping Guardian Processes flow .....	11
Display Looping OSS Processes flow.....	11
Display Memory Metrics flow .....	11
Display Network Metrics flow .....	12
Display Number of Processors flow.....	12
Display OS Info flow.....	12
Display OSS File Systems and How Full flow.....	12
Get Active OSS Users flow .....	13
Get Guardian Users flow .....	13
State change flows.....	13
Abort Guardian Persistent Process flow.....	13
Change Guardian Process Priority flow .....	14
Run Guardian Process flow.....	14
Run OSS Process flow .....	15
Run OSS Process with Changed Default Priority flow.....	15
Start Guardian Persistent Process flow .....	15
Stop Guardian Process flow.....	16
Stop OSS Process flow .....	16
Utility operations and flows .....	16
Get Time Difference operation.....	16
Check Guardian Process by File Name flow .....	17
Check Guardian Process by PID flow .....	17
Check Guardian Process by Process Name flow.....	17
Check Guardian Process Pair by Process Name flow.....	18
Check OSS Process by File Name flow .....	18
Check OSS Process by PID flow.....	18
Check Time Duration flow .....	19
Display Current Time flow .....	19
Get Guardian Process List flow.....	19
Get OSS Process List flow .....	19
Get PID from Guardian Process Name flow .....	20
Health check flow .....	20
NonStop Health Check flow.....	20
Disk operation flows .....	20
Abort Disk Path flow.....	21
Configure Disk Volume flow .....	21
Configure Storage CLIM flow.....	22
Display Disk Path Status flow .....	22
Display Disk Volume Metrics flow .....	23
Display Disk Volume Status flow .....	23
Display Disk Volume Usage flow.....	23
Start Disk Path flow .....	23
Start Disk Volume flow .....	24

Start Mirror Disk flow .....	24
Start Primary Disk flow .....	24
Stop Disk Path flow .....	24
Stop Disk Volume flow .....	25
File operation flows .....	25
Change Guardian File Owner flow .....	25
Change Guardian File Security flow .....	26
Change OSS File or Directory Owner flow .....	26
Change OSS File or Directory Security flow .....	26
Check Guardian File Integrity flow .....	27
Delete Guardian File flow .....	27
Delete OSS Directory flow .....	27
Delete OSS File flow .....	28
Display Guardian File Locks flow .....	28
Display Guardian File Openers flow .....	28
Display OSS File System Usage flow .....	28
Memory and processor operation flows .....	29
Display CPU Metrics flow .....	29
Display CPU Utilization flow .....	29
Display Disk Volumes and How Full flow .....	29
Display Free Memory flow .....	29
Display Memory Metrics flow .....	29
Display Number of Processors flow .....	29
Display OSS File Systems and How Full flow .....	30
Network operation flows .....	30
Abort CLIM flow .....	30
Abort Provider flow .....	30
Change Physical Ethernet Interface Jumbo Frame Mode flow .....	30
Change Physical Ethernet Interface MAC Address flow .....	31
Configure IP Data Provider flow .....	31
Configure IP/Telco CLIM flow .....	32
Configure Physical Ethernet Interface flow .....	33
Configure Physical Ethernet Interface IP Address flow .....	33
Display All Ethernet Interface Status flow .....	33
Display All Provider Status flow .....	34
Display CLIM Status flow .....	34
Display Network Metrics flow .....	34
Display Open Sockets flow .....	34
Display Physical Ethernet Interface Status flow .....	34
Display Provider Status flow .....	35
Ping flow .....	35
Start CLIM flow .....	35
Start Physical Ethernet Interface flow .....	36
Start Provider flow .....	36
Stop CLIM flow .....	36
Stop Physical Ethernet Interface flow .....	37

Stop Provider flow .....	37
Trace Route flow .....	37
Turn Off Physical Ethernet Interface Autonegotiation Mode flow .....	38
Turn on Physical Ethernet Interface Autonegotiation Mode flow .....	38
OS and server operation flows .....	39
Check Time Duration flow .....	39
Display Current Time flow .....	39
Display Last Boot Time flow .....	39
Display OS Info flow.....	39
Get Guardian Users flow .....	39
Get Active OSS Users flow .....	39
Process operation flows .....	39
Abort Guardian Persistent Process flow.....	40
Change Guardian Process Priority flow .....	40
Check Guardian Process by File Name flow .....	40
Check Guardian Process by PID flow .....	40
Check Guardian Process by Process Name flow.....	40
Check Guardian Process Pair by Process Name flow.....	40
Check OSS Process by File Name flow .....	40
Check OSS Process by PID flow.....	40
Display Looping Guardian Processes flow .....	41
Display Looping OSS Processes flow.....	41
Get Guardian Process List flow.....	41
Get OSS Process List flow .....	41
Get PID from Guardian Process Name flow .....	41
Run Guardian Process flow.....	41
Run OSS Process flow .....	41
Run OSS Process with Changed Default Priority flow.....	41
Start Guardian Persistent Process flow .....	41
Stop Guardian Process flow.....	42
Stop OSS Process flow .....	42
Remote Command operation flow .....	42
NonStop Remote Command operation.....	42



# Overview of NonStop Content integration

With this integration, administrators can use over 120 HP Operation Orchestration (OO) out-of-the-box flows and operations that are integrated into HP NonStop Content version 1.0. You can use these flows and operations to communicate with the NonStop system, report system health and resource status, and perform most common NonStop operations. The included operations and flows support many different NonStop system platforms and software subsystems.

Using OO Studio, the NonStop operations and flows can also serve as templates or examples for you to build your own custom flows, or integrate them into existing flows for incident resolution, change orchestration, routine maintenance tasks, or any other automated tasks.

In OO Studio, the HP NonStop Content flows are located in:

- The Library/Accelerator Packs/Operating Systems/NonStop/ folder and
- The Library/Operations/Operating Systems/NonStop folder

The flows in the Library/Accelerator Packs/Operating Systems/NonStop/ folder are meant to run by themselves. The operations in the Library/Operations/Operating Systems/NonStop/ folder are sealed and cannot be changed once HP OO Central has been installed. The flows in this folder are meant to work as subflows or operations.

A comprehensive example of a NonStop Health Check Flow is included for a system running the OSS file-system and configured with CLIM components. This flow can be modified by users to suit specific system configurations if needed.

## Use cases and scenarios

This section defines the major use cases for the NonStop Content integration, and lists the operations and flows that you can use to implement them.

The following NonStop flows are installed in the OO Library/Accelerator Packs/Operating Systems/NonStop/ folder and subfolders:

1. Information gathering:
  - Display All Ethernet Interface Status flow
  - Display All Provider Status flow
  - Display CPU Metrics flow
  - Display CPU Utilization flow
  - Display Disk Volume Metrics flow
  - Display Disk Volume Usage flow
  - Display Disk Volumes and How Full flow
  - Display Free Memory flow
  - Display Last Boot Time flow
  - Display Looping Guardian Processes flow
  - Display Looping OSS Processes flow
  - Display Memory Metrics flow
  - Display Network Metrics flow
  - Display Number of Processors flow
  - Display OS Info flow
  - Display OSS File Systems and How Full flow
  - Get Active OSS Users flow

- Get Guardian Users flow
- 2. State change:
  - Abort Guardian Persistent Process flow
  - Change Guardian Process Priority flow
  - Run Guardian Process flow
  - Run OSS Process flow
  - Run OSS Process with Changed Default Priority flow
  - Start Guardian Persistent Process flow
  - Stop Guardian Process flow
  - Stop OSS Process flow
- 3. Utility:
  - Get Time Difference operation (internal use only)
  - Check Guardian Process by File Name flow
  - Check Guardian Process by PID flow
  - Check Guardian Process by Process Name flow
  - Check Guardian Process Pair by Process Name flow
  - Check OSS Process by File Name flow
  - Check OSS Process by PID flow
  - Check Time Duration flow
  - Display Current Time flow
  - Get Guardian Process List flow
  - Get OSS Process List flow
  - Get PID from Guardian Process Name flow
- 4. Health check:
  - NonStop Health Check flow

The following NonStop flows are installed in the OO Library/Operations/Operating Systems/NonStop/ folder and subfolders:

- 5. Disk operations:
  - Abort Disk Path flow
  - Configure Disk Volume flow
  - Configure Storage CLIM flow
  - Display Disk Path Status flow
  - Display Disk Volume Metrics flow
  - Display Disk Volume Status flow
  - Display Disk Volume Usage flow
  - Start Disk Path flow
  - Start Disk Volume flow
  - Start Mirror Disk flow
  - Start Primary Disk flow
  - Stop Disk Path flow
  - Stop Disk Volume flow
- 6. File operations:
  - Change Guardian File Security flow
  - Change Guardian File Owner flow

- Change OSS File or Directory Owner flow
  - Change OSS File or Directory Security flow
  - Delete Guardian File flow
  - Delete OSS Directory flow
  - Delete OSS File flow
  - Display OSS File System Usage flow
  - Guardian File Integrity flow
  - Guardian File Locks flow
  - Guardian File Openers flow
7. Memory and processors operations:
- Display CPU Metrics flow
  - Display CPU Utilization flow
  - Display Disk Volumes and How Full flow
  - Display Free Memory flow
  - Display Memory Metrics flow
  - Display Number of Processors flow
  - Display OSS File Systems and How Full flow
8. Network operations:
- Abort CLIM flow
  - Abort Provider flow
  - Change Physical Ethernet Interface Jumbo Frame Mode flow
  - Change Physical Ethernet Interface MAC Address flow
  - Configure IP Data Provider flow
  - Configure IP or Telco CLIM flow
  - Configure Physical Ethernet Interface flow
  - Configure Physical Ethernet Interface IP Address flow
  - Display All Ethernet Interface Status flow
  - Display All Provider Status flow
  - Display CLIM Status flow
  - Display Network Metrics flow
  - Display Open Sockets flow
  - Display Physical Ethernet Interface Status flow
  - Display Provider Status flow
  - Ping flow
  - Start CLIM flow
  - Start Physical Ethernet Interface flow
  - Start Provider flow
  - Stop CLIM flow
  - Stop Physical Ethernet Interface flow
  - Stop Provider flow
  - Trace Route flow
  - Turn Off Physical Ethernet Interface Autonegotiation Mode flow
  - Turn On Physical Ethernet Interface Autonegotiation Mode flow
9. OS and server operations:

- Check Time Duration flow
- Display Current Time flow
- Display Last Boot Time flow
- Display OS Info flow
- Get Active OSS Users flow
- Get Guardian Users flow

#### 10. Process operations:

- Abort Guardian Persistent Process flow
- Change Guardian Process Priority flow
- Check Guardian Process by File Name flow
- Check Guardian Process by PID flow
- Check Guardian Process by Process Name flow
- Check Guardian Process Pair by Process Name flow
- Check OSS Process by File Name flow
- Check OSS Process by PID flow
- Display Looping Guardian Processes flow
- Display Looping OSS Processes flow
- Get Guardian Process List flow
- Get OSS Process List flow
- Get PID from Guardian Process Name flow
- Run Guardian Process flow
- Run OSS Process flow
- Run OSS Process with Changed Default Priority flow
- Start Guardian Persistent Process flow
- Stop Guardian Process flow
- Stop OSS Process flow

#### 11. Remote commands:

- NonStop Remote Command operation

## Installation and configuration instructions

Although you can install HP NonStop OO Content version 1.0 manually, it is recommended that you install it using the BSA Essentials Live Network Connector.

### Installing NonStop OO Content version 1.0 using the BSA Essentials Live Network

#### To install Nonstop OO Content version 1.0 using the BSA Essentials Live Network Connector

1. Configure the Live Network Connector, and triggering a download for the OO\_nonstop stream. For more information, see *the Live Network Connector User Guide*, which is located at %OO\_home%\Central\tools\LNC.

- At the location from which you install the Live Network Connector, type the following, and then press ENTER:  
`live-network-connector download`
- At the same location, type the following, and then press ENTER:  
`live-network-connector import`
- Restart the RSJRAS service on all RASes in your OO deployment.

## Installing NonStop OO Content version 1.0 manually

### To install NonStop Content version 1.0 on a Central server

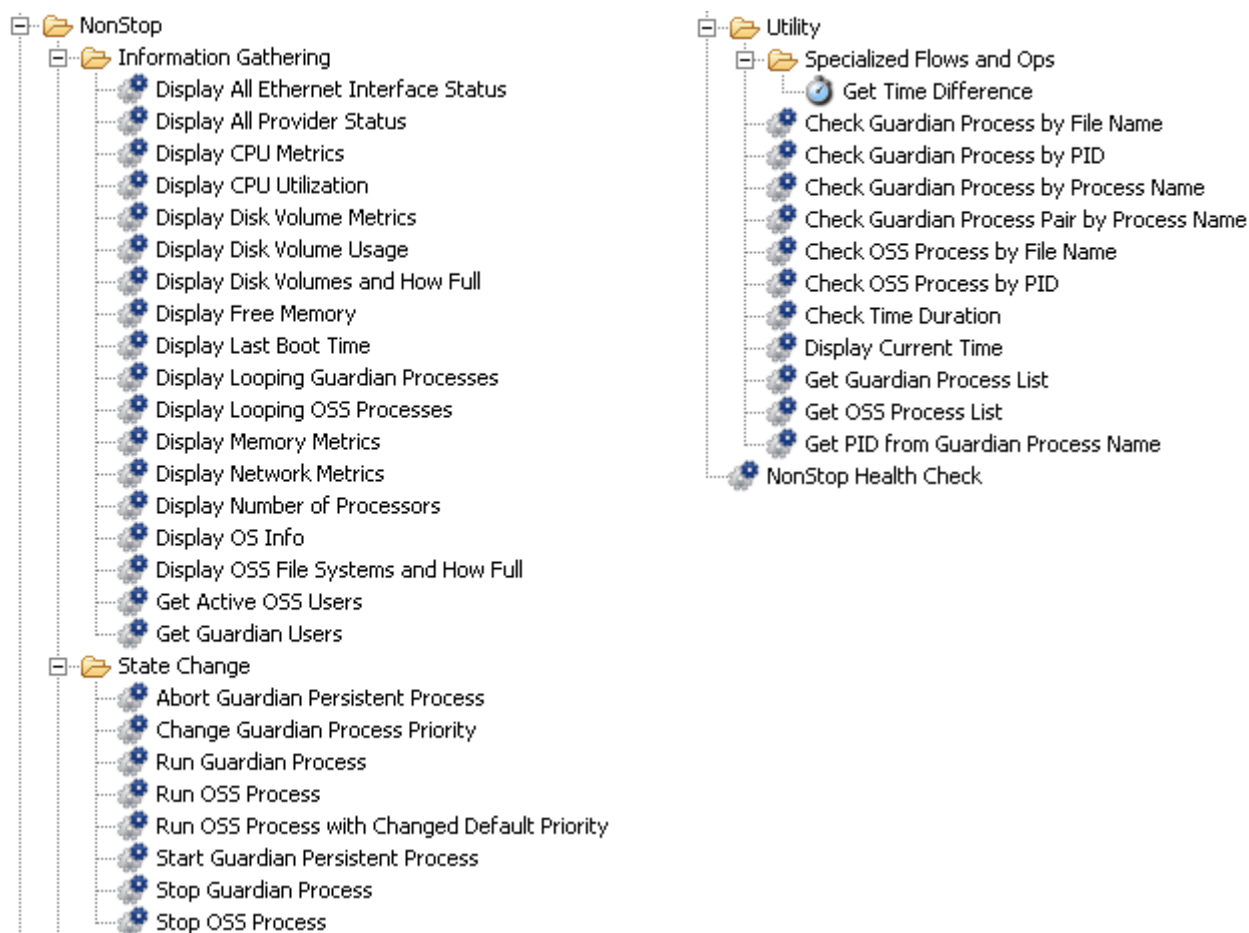
- Close Studio and make sure that Central and your RAS are running.
- From <http://www.hp.com/go/bsaessentialsnetwork>, click **Operations Orchestration Community** and log in with your HP Passport credentials.
- Navigate to and click **Important Downloads**.
- Navigate to and copy the Oo-nonstop-7.51.01.001.jar file to the \%OO\_home%\jre1.6\bin\ directory.
- Click the **Start** menu, and then click **Run**.
- In the **Run** dialog box, type `cmd` and then click **OK**.
- In the command window, change to the \%OO\_home%\jre1.6\bin\ directory, and then type:  
`java -Xmx1024m -jar Oo-nonstop-7.51.01.001.jar -centralURL https://localhost:8443 -centralUsername <user_name> -centralPassword <password>`
- Restart the RSJRAS service on all RASes in your OO deployment.

## Versions

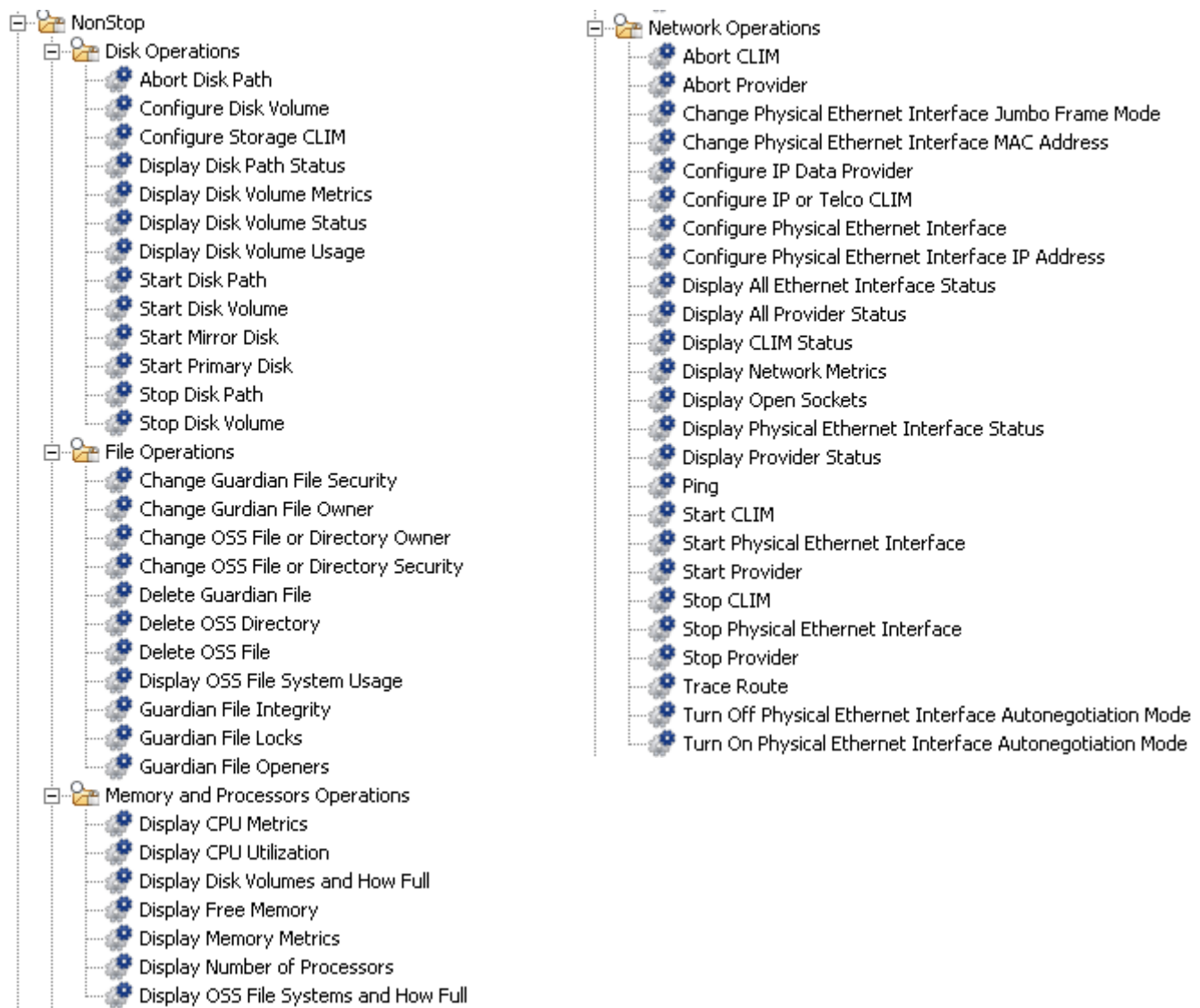
Operations Orchestration Version	NonStop Content Version
9.00	1.0

## NonStop Content integration operation and flow infrastructure

The HP NonStop Content integration includes the following flows and operations in the OO Studio Library/Accelerator Packs/Operating Systems/NonStop/ and Library/Operations/Operating Systems/NonStop/ folders and subfolders.



**Figure 1 – HP NonStop flows in the Library/Accelerator Packs/Operating Systems/NonStop/ folder**



**Figure 2 – HP NonStop flows in Library/Operations/Operating Systems/NonStop/ folder**

## Common inputs in the integration

OO flows and operations use inputs to specify how they obtain the data that they need and when the data is obtained. The following inputs are used consistently throughout the NonStop Content integration's operations and flows.

### **host**

The name or IP address of the host.

### **username**

The username to connect to the host.

### **password**

The password for the username.

**protocol**

The protocol used to run the command (the valid values are **Telnet2TACL**, **Telnet2OSH**, **SSH2TACL**, and **SSH2OSH**).

**timeout**

The time in milliseconds to wait for the command to complete (optional, the default is **30** seconds).

**notifyMethod**

The method of notification (valid values are **Email**, **Display**, **Write to File**, and **None**).

## Operation and flow specifics

This section describes the NonStop Content integration's operations and flows, including any operation- or flow-specific inputs. The flows and operations are grouped by their basic functionality:

- Information gathering
- State change
- Utility
- Health check
- Disk operations
- File operations
- Memory and processors operations
- Network operations
- OS and server operations
- Process operations
- Remote commands

### Information gathering flows

These flows are located in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder.

#### Display All Ethernet Interface Status flow

The **Display All Ethernet Interface Status** flow displays the current status of all Ethernet interfaces for all CLIMs in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.



## Display All Provider Status flow

The **Display All Provider Status** flow displays the current status of all providers for all CLIMs in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### **returnResult**

The success or failure result of the operation.

## Display CPU Metrics flow

The **Display CPU Metrics** flow displays the metrics of a logical processor in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### **cpu**

The logical processor whose metrics the flow displays.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### **returnResult**

The success or failure result of the operation.

## Display CPU Utilization flow

The **Display CPU Utilization** flow displays the processor busy percentages of all logical processors in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### **returnResult**

The success or failure result of the operation.

## Display Disk Volume Metrics flow

The **Display Disk Volume Metrics** flow displays the metrics of a disk volume in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### **volume**

The disk volume whose metrics the flow displays.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Disk Volume Usage flow

The **Display Disk Volume Usage** flow displays the distribution of space on a disk volume in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**volume**

The disk volume whose usage the flow displays.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Disk Volumes and How Full flow

The **Display Disk Volumes and How Full** flow displays the distribution of space on all disk volumes in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Free Memory flow

The **Display Free Memory** flow displays the number of swappable pages that are not currently assigned to any process, the number of locked pages, the number of locked (KSEGO) pages, and the total faults of all logical processors in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Last Boot Time flow

The **Display Last Boot Time** flow displays the last coldload time of the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Looping Guardian Processes flow

The **Display Looping Guardian Processes** flow displays the names, PIDs, and program file names of all Guardian processes with priority less than 50 in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Looping OSS Processes flow

The **Display Looping OSS Processes** flow displays the names, PIDs, and command file names of all OSS processes with priority less than 50 in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Memory Metrics flow

The **Display Memory Metrics** flow displays the number of swappable pages not currently assigned to any process, the number of locked pages, the number of locked (KSEG0) pages, and the total faults of a logical processor in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**cpu**

The logical processor whose metrics the flow displays.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Display Network Metrics flow

The **Display Network Metrics** flow displays the network metrics of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### clim-name

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display Number of Processors flow

The **Display Number of Processors** flow displays the number of logical processors in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display OS Info flow

The **Display OS Info** flow displays the operating system release ID and current SYSnn of the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display OSS File Systems and How Full flow

The **Display OSS File Systems and How Full** flow displays the capacity of all OSS file systems in the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

### Get Active OSS Users flow

The **Get Active OSS Users** flow displays a list of all of the active OSS users of the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

#### **returnResult**

The success or failure result of the operation.

### Get Guardian Users flow

The **Get Guardian Users** flow displays a list of all of the Guardian users of the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

#### **returnResult**

The success or failure result of the operation.

## State change flows

These flows are located in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder.

### Abort Guardian Persistent Process flow

The **Abort Guardian Persistent Process** flow aborts a Guardian persistent process on the system via SSH or Telnet, as quickly as possible.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

#### **process-name**

The process name (without \$ZZKRN.#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

#### **returnResult**

The success or failure result of the operation.

## Change Guardian Process Priority flow

The **Change Guardian Process Priority** flow changes the priority of a running Guardian process on the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### process-name

The process name or CPU, PIN.

### priority

The priority (the valid values are **1** through **199**).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Run Guardian Process flow

The **Run Guardian Process** flow runs a Guardian process on the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### program-file

The program file name (`$volume.subvolume.filename`).

### cpu

The logical processor on which the Guardian process runs.

### process-name

The process name (leave this input blank for an automatically-generated name).

### priority

The priority (the valid values are **1** through **199**).

### in-file

The input file or process name (leave this input blank to send spaces as the input file name).

### out-file

The output file name (leave this input blank to send spaces as the output file name).

### home-term

The home terminal.

### high-pin

The high pin value (the valid values are **on** and **off**).

### arguments

The process arguments.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Run OSS Process flow

The **Run OSS Process** flow runs an OSS process on the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### program-file

The program file (with the full path) or the command name.

### cpu

The logical processor on which the OSS process runs.

### process-name

The process name ([/G/processname](#)).

### priority

The priority (the valid values are **1** through **199**).

### home-term

The home terminal ([/G/terminalname](#)).

### arguments

The process arguments.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Run OSS Process with Changed Default Priority flow

The **Run OSS Process with Changed Default Priority** flow runs an OSS process with changed default priority on the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### command

The program file (with full path) or the command name.

### nice-value

The nice value (the valid values are **1** through **19** and **-1** through **-19**).

### arguments

The process arguments.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Start Guardian Persistent Process flow

The **Start Guardian Persistent Process** flow starts a Guardian persistent process on the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**process-name**

The process name (without \$ZZKRN.#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Stop Guardian Process flow

The **Stop Guardian Process** flow stops a Guardian process on the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**process-name**

The process name or CPU, PIN.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Stop OSS Process flow

The **Stop OSS Process** flow stops an OSS process on the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**PID**

The process ID list (items in the list are separated by spaces).

**signal**

The signal name (with or without the prefix [SIG](#)).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Utility operations and flows

These operations and flows are located in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder.

### Get Time Difference operation

The **Get Time Difference** operation is an internal operation that computes the number of minutes between a given time and the current time. This operation cannot be run by itself.



All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**time**

The given time.

The flow produces a **Success** response if the time difference is calculated. It produces a **Failure** response if the time cannot be calculated.

The flow's result is the number of minutes. This is computed in the operation's scriptlet.

### Check Guardian Process by File Name flow

The **Check Guardian Process by File Name** flow checks a Guardian process on the system by the program file name, via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**file-name**

The program file name (`$volume.subvolume.filename`).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Check Guardian Process by PID flow

The **Check Guardian Process by PID** flow checks a Guardian process on the system by the PID via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**PID**

The process ID (CPU, PIN).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Check Guardian Process by Process Name flow

The **Check Guardian Process by Process Name** flow checks a Guardian process on the system by the process name via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**process-name**

The process name.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Check Guardian Process Pair by Process Name flow

The **Check Guardian Process Pair by Process Name** flow checks a Guardian process pair on the system by the process name via SSH or Telnet

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**process-name**

The process name.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Check OSS Process by File Name flow

The **Check OSS Process by File Name** flow checks an OSS process on the system by the load file name via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**filename**

The load file name (with the full path).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Check OSS Process by PID flow

The **Check OSS Process by PID** flow checks an OSS process on the system by the PID via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**PID**

The process ID list (items in the list are separated by spaces).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Check Time Duration flow

The **Check Time Duration** flow displays the number of minutes between a given time and the current time on the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### time

The given time (in the format MMM DD HH:MM:SS YYYY).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display Current Time flow

The **Display Current Time** flow displays the current time on the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Get Guardian Process List flow

The **Get Guardian Process List** flow displays a list of all Guardian processes on the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Get OSS Process List flow

The **Get OSS Process List** flow displays a list of all OSS processes on the system via SSH or Telnet.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Get PID from Guardian Process Name flow

The **Get PID from Guardian Process Name** flow displays the PID of a Guardian process on the system from the process name via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### process-name

The process name.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Health check flow

This flow is located in the Library/Accelerator Packs/Operating Systems/NonStop/ folder.

### NonStop Health Check flow

The **NonStop Health Check** flow performs a health check on the system, including the following:

- Pings the system and displays the ping status.
- Displays the last coldload time of the system,
- Displays the operating system release ID and current SYSnn of the system.
- Displays the number of logical processors in the system.
- Displays the processor busy percentages of all logical processors in the system.
- Displays the number of swappable pages not currently assigned to any process, the number of locked pages, the number of locked (KSEG0) pages, and the total faults of all logical processors in the system.
- Displays the names, PIDs, and program file names of all Guardian processes in the system with priority less than 50.
- Displays the names, PIDs, and command file names of all OSS processes in the system with priority less than 50.
- Displays the distribution of space on all disk volumes in the system.
- Displays the capacity of all OSS file systems in the system.
- Displays the current status of all Ethernet interfaces for all CLIMs in the system.
- Displays the current status of all providers for all CLIMs in the system.

All of the flow's inputs are described in [Common inputs in the integration](#).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

## Disk operation flows

These flows are located in the Library/Operations/Operating Systems/NonStop/Disk Operations/ folder.

## Abort Disk Path flow

The **Abort Disk Path** flow aborts a disk path in the system even if there are open files via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### disk

The disk volume.

### path

The disk path (P, B, M, MB).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Configure Disk Volume flow

The **Configure Disk Volume** flow configures a disk volume in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### disk

The disk volume name.

### primary-clim

The primary CLIM (without \$ZZCIP.).

### backup-clim

The backup CLIM (without \$ZZCIP.).

### primary-lun

The LUN on primary CLIM.

### mirror-clim

The mirror CLIM (without \$ZZCIP.).

### mbackup-clim

The mirror-backup CLIM (without \$ZZCIP.)

### mirror-lun

The LUN on mirror CLIM.

### primary-cpu

The primary DP2 logical processor.

### backup-cpu

The backup DP2 logical processor.

### start-state

The DP2 state when the system is loaded or reloaded (the valid values are **started** and **stopped**).

### num-diskprocesses

The number of allocated disk processes (the valid values are **1** through **8**).

### **write-cache**

The write cache mode (the valid values are **enabled** and **disabled**).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### **returnResult**

The success or failure result of the operation.

## **Configure Storage CLIM flow**

The **Configure Storage CLIM** flow configures a storage CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### **clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

### **group**

The group number of the ServerNet switch to which the CLIM is connected.

### **module**

The module number of the ServerNet switch to which the CLIM is connected.

### **slot**

The slot number of the ServerNet switch to which the CLIM is connected.

### **port**

The port number of the ServerNet switch to which the CLIM is connected.

### **fiber**

The fiber number of the ServerNet switch to which the CLIM is connected.

### **connPts**

The number of connections per ServerNet fabric (the valid values are **1** and **2**).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### **returnResult**

The success or failure result of the operation.

## **Display Disk Path Status flow**

The **Display Disk Path Status** flow displays the current status of a disk path in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### **disk**

The disk volume.

### **path**

The disk path (P, B, M, MB).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Disk Volume Metrics flow

This flow is the same as the **Display Disk Volume Metrics** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### Display Disk Volume Status flow

The **Display Disk Volume Status** flow displays the current status of a disk volume in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**disk**

The disk volume.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Display Disk Volume Usage flow

This flow is the same as the **Display Disk Volume Usage** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### Start Disk Path flow

The **Start Disk Path** flow starts a disk path in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**disk**

The disk volume.

**Path**

The disk path (P, B, M, MB).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Start Disk Volume flow

The **Start Disk Volume** flow starts a disk volume in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### disk

The disk volume.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Start Mirror Disk flow

The **Start Mirror Disk** flow starts the mirror disk of a disk volume in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### disk

The disk volume.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Start Primary Disk flow

The **Start Primary Disk** flow starts the primary disk of a disk volume in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### disk

The disk volume.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Stop Disk Path flow

The **Stop Disk Path** flow stops a disk path in the system even if there are open files via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### disk

The disk volume.



**path**

The disk path (P, B, M, MB).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Stop Disk Volume flow

The **Stop Disk Volume** flow stops a disk volume in the system even if there are open files via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**disk**

The disk volume.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## File operation flows

These flows are located in the Library/Operations/Operating Systems/NonStop/File Operations/ folder.

### Change Guardian File Owner flow

The **Change Guardian File Owner** flow changes the owner of a Guardian file in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**filename**

The file name (`$volume.subvolume.filename`).

**owner**

The owner (`groupname.username` or `groupnumber, usernumber`).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Change Guardian File Security flow

The **Change Guardian File Security** flow changes the security setting of a Guardian file in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### filename

The file name (`$volume.subvolume.filename`).

### security-string

The security string ("rwep") or security number.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Change OSS File or Directory Owner flow

The **Change OSS File or Directory Owner** flow changes the owner of an OSS file or directory in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### owner

The user or group name.

### pathname

The file or directory name (with full path).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Change OSS File or Directory Security flow

The **Change OSS File or Directory Security** flow changes the security setting of an OSS file or directory in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### user

The user (the valid values are **u** for user, **g** for group, **o** for owner, and **a** for all).

### operation

The operation to turn on or turn off the permission (the valid values are **=**, **+**, and **-**).

### permission

The permission.

### filename

The file or directory name (with full path).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Check Guardian File Integrity flow

The **Check Guardian File Integrity** flow checks the internal consistency of a structured Guardian file in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**filename**

The file name (`$volume.subvolume.filename`).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Delete Guardian File flow

The **Delete Guardian File** flow deletes a Guardian file in the system via SSH or Telnet, without any confirmation.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**filename**

The file name (`$volume.subvolume.filename`).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Delete OSS Directory flow

The **Delete OSS Directory** flow deletes an OSS directory in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**dirname**

The directory name (with full path).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Delete OSS File flow

The **Delete OSS File** flow deletes an OSS file in the system via SSH or Telnet, without any confirmation.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### filename

The file name (with full path).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display Guardian File Locks flow

The **Display Guardian File Locks** flow displays the locks on a Guardian file in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### filename

The file name (`$volume.subvolume.filename`).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display Guardian File Openers flow

The **Display Guardian File Openers** flow displays the openers of a Guardian file in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### filename

The file name (`$volume.subvolume.filename`).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display OSS File System Usage flow

The **Display OSS File System Usage** flow displays the capacity of an OSS file system in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

## **filesystem**

The file system or mount point.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

## **returnResult**

The success or failure result of the operation.

## **Memory and processor operation flows**

These flows are located in the Library/Operations/Operating Systems/NonStop/Memory and Processors/ folder.

### **Display CPU Metrics flow**

This flow is the same as the **Display CPU Metrics** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### **Display CPU Utilization flow**

This flow is the same as the **Display CPU Utilization** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### **Display Disk Volumes and How Full flow**

This flow is the same as the **Display Disk Volumes and How Full** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### **Display Free Memory flow**

This flow is the same as the **Display Free Memory** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### **Display Memory Metrics flow**

This flow is the same as the **Display Memory Metrics** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### **Display Number of Processors flow**

This flow is the same as the **Display Number of Processors** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

## Display OSS File Systems and How Full flow

This flow is the same as the **Display OSS File Systems and How Full** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

## Network operation flows

These flows are located in the Library/Operations/Operating Systems/NonStop/Network Operations/ folder.

### Abort CLIM flow

The **Abort CLIM** flow aborts a CLIM in the system without any confirmation via SSH or Telnet even if there are open sockets using the CLIM.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

#### clim-name

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

#### returnResult

The success or failure result of the operation.

### Abort Provider flow

The **Abort Provider** flow aborts a provider in the system without any confirmation via SSH or Telnet even if there are open sockets using the provider.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

#### provider-name

The provider name (without \$ZZCIP.).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

#### returnResult

The success or failure result of the operation.

## Change Physical Ethernet Interface Jumbo Frame Mode flow

The **Change Physical Ethernet Interface Jumbo Frame Mode** flow changes the jumbo frame mode of a physical Ethernet interface of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

#### clim-name

The CLIM name (without \$ZZCIP.).

**interface-name**

The interface name.

**mode**

The jumbo frame mode (the valid values are **on** and **off**).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Change Physical Ethernet Interface MAC Address flow

The **Change Physical Ethernet Interface MAC Address** flow changes the MAC address of a physical Ethernet interface of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

**interface-name**

The interface name.

**mac-address**

The software MAC address.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Configure IP Data Provider flow

The **Configure IP Data Provider** flow configures an IP data provider in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**provider-name**

The provider name (without \$ZZCIP.).

**num-ports**

The number of ports reserved for TCP, SCTP, and UDP shared ephemeral ports on multiple CLIMs (the valid values are **100** through **4000**).

**family**

The network family (the valid values are **INET** and **DUAL**).

**tp-name**

The transport provider name.

**host-name**

The host name.

**host-id**

The host ID.

**brecv-port**

The UDP ports to receive broadcast messages on sockets bound to specific IP addresses or INADDR\_ANY (list items are comma-separated).

**queue-size**

The minimum queue length on a TCP socket when a socket listen or accept is handled, if the queue length specified in the socket request is lower (the valid values are **1** through **1024**).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Configure IP/Telco CLIM flow

The **Configure IP/Telco CLIM** flow configures an IP or Telco CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

**group**

The group number of the ServerNet switch to which the CLIM is connected.

**module**

The module number of the ServerNet switch to which the CLIM is connected.

**slot**

The slot number of the ServerNet switch to which the CLIM is connected.

**port**

The port number of the ServerNet switch to which the CLIM is connected.

**fiber**

The fiber number of the ServerNet switch to which the CLIM is connected.

**connPts**

The number of connections per ServerNet fabric (the valid values are **1** and **2**).

**mode**

The operational mode (the valid values are **IP** and **OPEN**).

**provider-name**

The provider name (without \$ZZCIP.).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.



## Configure Physical Ethernet Interface flow

The **Configure Physical Ethernet Interface** flow configures a physical Ethernet interface of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### **clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

### **interface-name**

The interface name.

### **jumbo-mode**

The jumbo frame mode (the valid values are **on** and **off**).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### **returnResult**

The success or failure result of the operation.

## Configure Physical Ethernet Interface IP Address flow

The **Configure Physical Ethernet Interface IP Address** flow configures the IP address of a physical Ethernet interface of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### **clim-name**

The CLIM name (without \$ZZCIP.).

### **interface-name**

The interface name.

### **ip-address**

The IP address.

### **netmask**

The network mask in dotted quad form (for IPv4 address) or the number of prefix bits (for IPv6 address).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### **returnResult**

The success or failure result of the operation.

## Display All Ethernet Interface Status flow

This flow is the same as the **Display All Ethernet Interface Status** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

## Display All Provider Status flow

This flow is the same as the **Display All Provider Status** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

## Display CLIM Status flow

The Display CLIM Status flow displays the current status of a CLIM in the system via SSH or Telnet. All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### clim-name

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display Network Metrics flow

This flow is the same as the **Display Network Metrics** in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

## Display Open Sockets flow

The **Display Open Sockets** flow displays all sockets using a provider in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### provider-name

The provider name (without \$ZZCIP.).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

### returnResult

The success or failure result of the operation.

## Display Physical Ethernet Interface Status flow

The **Display Physical Ethernet Interface Status** flow displays the current status of a physical Ethernet interface of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

### clim-name

The CLIM name (without \$ZZCIP.).

### interface-name

The interface name.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Display Provider Status flow

The **Display Provider Status** flow displays the current status of a provider in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**provider-name**

The provider name (without \$ZZCIP.).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Ping flow

The **Ping** flow pings the requested IP address or hostname from the NonStop system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**target**

The target IP address or hostname to ping.

**packets**

The number of packets to send to the target.

**packetSize**

The size of packets to send to the target.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Start CLIM flow

The **Start CLIM** flow starts a CLIM in a system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Start Physical Ethernet Interface flow

The **Start Physical Ethernet Interface** flow starts a physical Ethernet interface of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

**interface-name**

The interface name.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Start Provider flow

The **Start Provider** flow starts a provider in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**provider-name**

The provider name (without \$ZZCIP.).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## Stop CLIM flow

The **Stop CLIM** flow stops a CLIM in the system via SSH or Telnet, as long as there are no open sockets using the CLIM.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Stop Physical Ethernet Interface flow

The **Stop Physical Ethernet Interface** flow stops a physical Ethernet interface of a CLIM in the system via SSH or Telnet, without any warning.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

**interface-name**

The interface name.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Stop Provider flow

The **Stop Provider** flow stops a provider in the system via SSH or Telnet, as long as there are no open sockets using the provider.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**provider-name**

The provider name (without \$ZZCIP.).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Trace Route flow

The **Trace Route** flow traces the network path of the Internet routers in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**max\_hops**

The maximum number of hops allowed.

**port-num**

The port number.

**Nqueries**

The number of queries.

**wait-time**

The duration of wait time.

**target**

The target location.

**data-size**

The trace packet size.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Turn Off Physical Ethernet Interface Autonegotiation Mode flow

The **Turn Off Physical Ethernet Interface Autonegotiation Mode** flow turns off the autonegotiation mode of a physical Ethernet interface of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

**interface-name**

The interface name.

**line-speed**

The line speed in Mbps (the valid values are **10** and **100**).

**duplex-mode**

The duplex mode (the valid values are **half** and **full**).

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

### Turn on Physical Ethernet Interface Autonegotiation Mode flow

The **Turn on Physical Ethernet Interface Autonegotiation Mode** flow turns on the autonegotiation of a physical Ethernet interface of a CLIM in the system via SSH or Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

**clim-name**

The CLIM name (without \$ZZCIP.). This variable can be obtained from the previous flow.

**interface-name**

The interface name.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

**returnResult**

The success or failure result of the operation.

## OS and server operation flows

These flows are located in the Library/Operations/Operating Systems/NonStop/OS and Server Operations/ folder.

### Check Time Duration flow

This flow is the same as the **Check Time Duration** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

### Display Current Time flow

This flow is the same as the **Display Current Time** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

### Display Last Boot Time flow

This flow is the same as the **Display Last Boot Time** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### Display OS Info flow

This flow is the same as the **Display OS Info** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### Get Guardian Users flow

This flow is the same as the **Get Guardian Users** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

### Get Active OSS Users flow

This flow is the same as the **Get Active OSS Users** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

## Process operation flows

These flows are located in the Library/Operations/Operating Systems/NonStop/Process Operations/ folder.

### Abort Guardian Persistent Process flow

This flow is the same as the **Abort Guardian Persistent Process** flow in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder, except that it does not contain a **Basic Notify** operation.

### Change Guardian Process Priority flow

This flow is the same as the **Change Guardian Process Priority** flow in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder, except that it does not contain a **Basic Notify** operation.

### Check Guardian Process by File Name flow

This flow is the same as the **Check Guardian Process by File Name** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

### Check Guardian Process by PID flow

This flow is the same as the **Check Guardian Process by PID** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

### Check Guardian Process by Process Name flow

This flow is the same as the **Check Guardian Process by Process Name** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

### Check Guardian Process Pair by Process Name flow

This flow is the same as the **Check Guardian Process Pair by Process Name** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

### Check OSS Process by File Name flow

This flow is the same as the **Check OSS Process by File Name** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

### Check OSS Process by PID flow

This flow is the same as the **Check OSS Process by PID** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.



## Display Looping Guardian Processes flow

This flow is the same flow as the **Display Looping Guardian Processes** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

## Display Looping OSS Processes flow

This flow is the same as the **Display Looping OSS Processes** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Information Gathering/ folder, except that it does not contain a **Basic Notify** operation.

## Get Guardian Process List flow

This flow is the same as the **Get Guardian Process List** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

## Get OSS Process List flow

This flow is the same as the **Get OSS Process List** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

## Get PID from Guardian Process Name flow

This flow is the same as the **Get PID from Guardian Process Name** flow in the Library/Accelerator Packs/Operating Systems/NonStop/Utility/ folder, except that it does not contain a **Basic Notify** operation.

## Run Guardian Process flow

This flow is the same as the **Run Guardian Process** flow in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder, except that it does not contain a **Basic Notify** operation.

## Run OSS Process flow

This flow is the same as the **Run OSS Process** flow in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder, except that it does not contain a **Basic Notify** operation.

## Run OSS Process with Changed Default Priority flow

This flow is the same as the **Run OSS Process with Changed Default Priority** flow in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder, except that it does not contain a **Basic Notify** operation.

## Start Guardian Persistent Process flow

This flow is the same as the **Start Guardian Persistent Process** flow in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder, except that it does not contain a **Basic Notify** operation.

## Stop Guardian Process flow

This flow is the same as the **Stop Guardian Process** flow in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder, except that it does not contain a **Basic Notify** operation.

## Stop OSS Process flow

This flow is the same as the **Stop OSS Process** flow in the Library/Accelerator Packs/Operating Systems/NonStop/State Change/ folder, except that it does not contain a **Basic Notify** operation.

## Remote Command operation flow

This flow is located in the Library/Operations/Operating Systems/NonStop/ folder.

### NonStop Remote Command operation

The **NonStop Remote Command** operation runs a command on the system via SSH/Telnet.

All of the flow's inputs except the following are described in [Common inputs in the integration](#).

#### **command**

The command sent to the system.

The flow produces a **Success** response if it executes successfully. It produces a **Failure** response if it fails.

The flow's result is:

#### **returnResult**

The success or failure result of the operation.