



# IT Operations Compliance

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Linux, Solaris, AIX, HP-UX, and Windows

## Troubleshooting Guide

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## Installation and initial configuration

**Problem:** HPE ITOC startup fails on the CentOS 6 server. The user cannot access the UI as the authentication/authorization service fails.

### Symptom

A message similar to the following appears in the `server.log` file on service startup.

```
[ acquireIncrement -> 3, acquireRetryAttempts -> 30, acquireRetryDelay -> 1000,
autoCommitOnClose -> false, automaticTestTable -> null, breakAfterAcquireFailure ->
false, checkoutTimeout -> 0, connectionCustomizerClassName -> null,
connectionTesterClassName -> com.mchange.v2.c3p0.impl.DefaultConnectionTester,
dataSourceName ->
1hgevfi9bmopcz4k66x0l|7ac02973, debugUnreturnedConnectionStackTraces -> false,
description -> null, driverClass -> org.postgresql.Driver, factoryClassLocation ->
null, forceIgnoreUnresolvedTransactions -> false, identityToken ->
1hgevfi9bmopcz4k66x0l|7ac02973, idleConnectionTestPeriod -> 0, initialPoolSize ->
20, jdbcUrl -> jdbc:postgresql://itoc158.qa.opsware.com:5432/itoc,
lastAcquisitionFailureDefaultUser -> null, maxAdministrativeTaskTime -> 0,
maxConnectionAge -> 0, maxIdleTime -> 0, maxIdleTimeExcessConnections -> 0,
maxPoolSize -> 250, maxStatements -> 0, maxStatementsPerConnection -> 0,
minPoolSize -> 20, numHelperThreads -> 3, numThreadsAwaitingCheckoutDefaultUser ->
0, preferredTestQuery -> null, properties -> {user=*****, password=*****},
propertyCycle -> 0, testConnectionOnCheckin -> false, testConnectionOnCheckout ->
false, unreturnedConnectionTimeout -> 0, usesTraditionalReflectiveProxies -> false]
...
Caused by: org.postgresql.util.PSQLException: Connection refused. Check that the
hostname and port are correct and that the postmaster is accepting TCP/IP
connections.
```

## Primary software component

CentOS

## Possible cause

It reproduces intermittently only when service is started using a native service subsystem such as `service itoc start`, which also occurs automatically when performing an install as a root user.

## Solution

Stop the HPE ITOC service, and restart the service using `<install_dir>/scripts/itoc start`.

**Problem:** When running HPE ITOC as a non-root user and the HPE ITOC install uses a JDK that was previously installed as root, you will see warning messages in the `server.log` file.

## Symptom

There are many warning messages in `<itoc_install_location>/log/server/server.log*`, such as the following:

```
2015-05-11 12:48:18,826 WARNING [java.util.prefs] (Timer-2) Couldn't flush system
prefs: java.util.prefs.BackingStoreException: /etc/.java/.systemPrefs/com create
failed.
```



## Primary software component

JDK

## Possible cause

The licensing component used by HPE ITOC is trying to access the preference store that triggers this warning. This has no functional effect.

## Solution

This warning can be ignored. If the user running HPE ITOC has permissions on the JDK install, then no warning will occur.

## HPE ITOC issues and use cases

Problem: All HPE ITOC services seem to be running, but nothing is accessible through the UI.

### Symptoms

In the JBoss `/opt/hp/itoc/log/server/server.log` file, you see content similar to the following:

```
2015-05-22 11:42:02,408 INFO [org.jboss.as] (Controller Boot Thread) JBAS015874: WildFly 8.1.0.Final "Kenny" started in 71512ms - Started 562 of 624 services (107 services are lazy, passive or on-demand)
```

```
2015-05-22 11:58:43,212 ERROR [org.jboss.as.controller.management-operation] (DeploymentScanner-threads - 1) JBAS014612: Operation ("read-resource") failed - address: ([("deployment" => "ocm.war"))]: java.lang.OutOfMemoryError: Java heap space
```

```
2015-05-22 11:58:43,213 INFO [org.jboss.as.server.deployment.scanner] (DeploymentScanner-threads - 1) JBAS015018: Deployment ocm.war was previously deployed by this scanner but has been removed from the server deployment list by another management tool. Marker file /opt/hp/itoc/wildfly-8.1.0.Final/standalone/deployments/ocm.war.undeployed is being added to record this fact.
```

...

```
2015-05-22 11:58:44,401 ERROR [stderr] (OCMScheduler Resource Worker Tasks-7-29) Exception in thread "OCMScheduler Resource Worker Tasks-7-29" java.lang.OutOfMemoryError: Java heap space
```

## Primary software component

JBoss

## Possible cause

An unrecoverable error occurs, such as Out Of Memory conditions, causing JBoss to fail to deploy any of the web services context.

## Solution

Enter the following:

```
cd /opt/hp/itoc/wildfly-8.1.0.Final/standalone/deployments
mv idm-service.war.undeployed idm-service.war.dodeploy
mv ocm.war.undeployed ocm.war.dodeploy
/opt/hp/itoc/scripts/appserver restart
```

**Problem:** Stopping the HPE ITOC service results in intermittent error.

## Symptom

When you stop the HPE ITOC service, you may see output similar to the following:

```
$ service itoc stop
Stopping Salt...
```

```
Stopping salt-master daemon: [ OK ]
```

```
Stopping salt-minion daemon: [ OK ]
```

```
Stopping HP ITOC service
```

```
...
```

```
Error occurred cannot stop the process
```

## Possible solution

Make sure that `/etc/hosts` is similar to the following:

```
127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4
::1 localhost6 localhost6.localdomain6
```

## Workaround

Wait for a short time, then try stopping the service again.

Look for the Java process: `#ps -ef|grep "java" | grep <itoc_install_directory>`, and kill this process.

Problem: The maintenance window **Job** view has only time slot info without any status.

## Symptom

In the maintenance window **Job** view, there is a time slot record but it does not have any job status.

## Possible causes

There are three possible causes:

- The maintenance window type is **Scan**, and it is scheduled to perform a scan against an SOA in which the last scan occurred halfway within the MSLO limit. If this is the case, you will see entries such as the following in <itoc\_install\_directory>/log/server/hpitoc-server.log:  
2015-09-18 19:30:00,684 DEBUG [ItocQuartzJobScheduler\_Worker-1]  
c.h.o.s.s.a.ItocAssemblageQueryAdapter [ItocAssemblageQueryAdapter.java:497]  
Rule in 0.5 of MSLO. Will not measure.
- The maintenance window type is either Remediate or Scan and Remediate, and it is scheduled to remediate an SOA in a state other than Non-Compliant. If this is the case, you will see entries such as the following in <itoc\_install\_directory>/log/server/hpitoc-server.log:  
2015-09-18 20:00:00,690 INFO [ItocQuartzJobScheduler\_Worker-3]  
c.h.o.s.c.s.ComplianceService [ComplianceService.java:627]  
ComplianceService.checkRunningOrFutureJobs: Nothing to execute for REMEDIATION 3  
  
2015-09-18 20:00:00,694 INFO [ItocQuartzJobScheduler\_Worker-3]  
c.h.o.s.s.a.ItocAssemblageQueryAdapter [ItocAssemblageQueryAdapter.java:581]  
Nothing to Scan or Remediate
- One SOA is assigned to multiple maintenance windows, and the maintenance windows scheduled start time or duration overlap with each other.

## Integration issues

### HPE SA issues

Problem: `run adapter_easy_install.sh` exits during the copy agent phase.

### Symptom

The `run adapter_easy_install.sh` command to install the HPE ITOC SA adapter exits during the copy agent phase with this error message:

```
/opt/hp/itoc/salt/srv/salt/minion_easy_install
```

```
...
```

```
/opt/hp/itoc/salt/srv/salt/Win64_minion-2015.5.5.exe: No such file or directory
```

### Possible causes

- The adapter and agent are already installed and/or
- The following files were not deleted from the `/tmp` directory after the previous adapter or agent were uninstalled:
  - `ITOC_SA_Lite-<version>`
  - `minion_easy_install`
  - `<platform>_minion--<version>`

## Solution

1. From the SA Slice host, uninstall first the adapter and then the agent.
2. From the SA Slice host, remove the above files from `/tmp` directory.

**Problem:** Run `adapter_easy_install.sh` exits during the agent install phase.

## Symptom

The run `adapter_easy_install.sh` command to install the HPE ITOC SA adapter exits during the agent installation phase with an error similar to the following:

```
Uncompressing RHEL 5 x86_64 minion.....  
  
Looks like a failed install. Uninstall and try again.  
  
Problem installing minion...
```

## Possible causes

- The previous adapter installation failed.
- The user uninstalled the agent but did not remove the files from `/tmp` directory.

## Solution

1. From the SA Slice host, uninstall first the adapter and then the agent.
2. From the SA Slice host, remove the following files from the /tmp directory:
  - ITOC\_SA\_Lite-<version>
  - minion\_easy\_install
  - <platform>\_minion--<version>

**Problem:** Run `adapter_easy_install.sh` shows an error during the agent registration phase.

## Symptom

Run `adapter_easy_install.sh` to install the HPE ITOC SA adapter shows the following error during the agent registration phase:

```
Registering minion...
```

```
The key glob 'itocserver.itoc.mysite.com' does not match any unaccepted keys.
```

## Possible cause

The specified SA Slice host was already registered with another HPE ITOC server.



## Solution

1. From the HPE ITOC server, run `<itoc_install_directory>/scripts/minion_reg.sh -d <agent_host>` to unregister.
2. From the SA Slice host, uninstall first the adapter and then the agent.
3. From the SA Slice host, remove the following files from the `/tmp` directory:
  - `ITOC_SA_Lite-<version>`
  - `minion_easy_install`
  - `<platform>_minion--<version>`
4. Retry `adapter_easy_install.sh`.

## Problem : A **Scan/Remediate** job against Resource Access Through SA fails

The job fails with the following:

```
pytwist.com.opsware.job.JobIsScheduledException: JobIsScheduledException:ID: HPSA-005
```

## Symptom

The **Scan/Remediate** job against Resource Access Through SA failed with the following exception:

Traceback (most recent call last):

File `"/opt/hp/itocSAadapter/adapter.py"`, line 362, in `<module>`

`main()`

File `"/opt/hp/itocSAadapter/adapter.py"`, line 358, in `main`

`start_adapter()`

File `"/opt/hp/itocSAadapter/adapter.py"`, line 339, in `start_adapter`

`job_ref = twist_execute(twist, sys.argv[5], payload) # server ref`

File `"/opt/hp/itocSAadapter/adapter.py"`, line 148, in `twist_execute`

```
wait_for_job(twist, job_ref)
File "/opt/hp/itocSAadapter/adapter.py", line 105, in wait_for_job
job_result = twist.job.JobService.getResult(job_ref)
File "build/pytwist/twistserver.py", line 323, in __call__
File "build/pytwist/twistserver.py", line 302, in _makeCall
File "build/pytwist/twistserver.py", line 276, in _makeCall
File "build/pytwist/twistserver.py", line 246, in _makeCall
pytwist.com.opsware.job.JobIsScheduledException: JobIsScheduledException:ID: HPSA-
005
Code: com.opsware.common.MessageSpec.ILLEGAL_VALUE
Details: self is set to the illegal value Run Server Script
(ScheduledJobRef:660001).
```

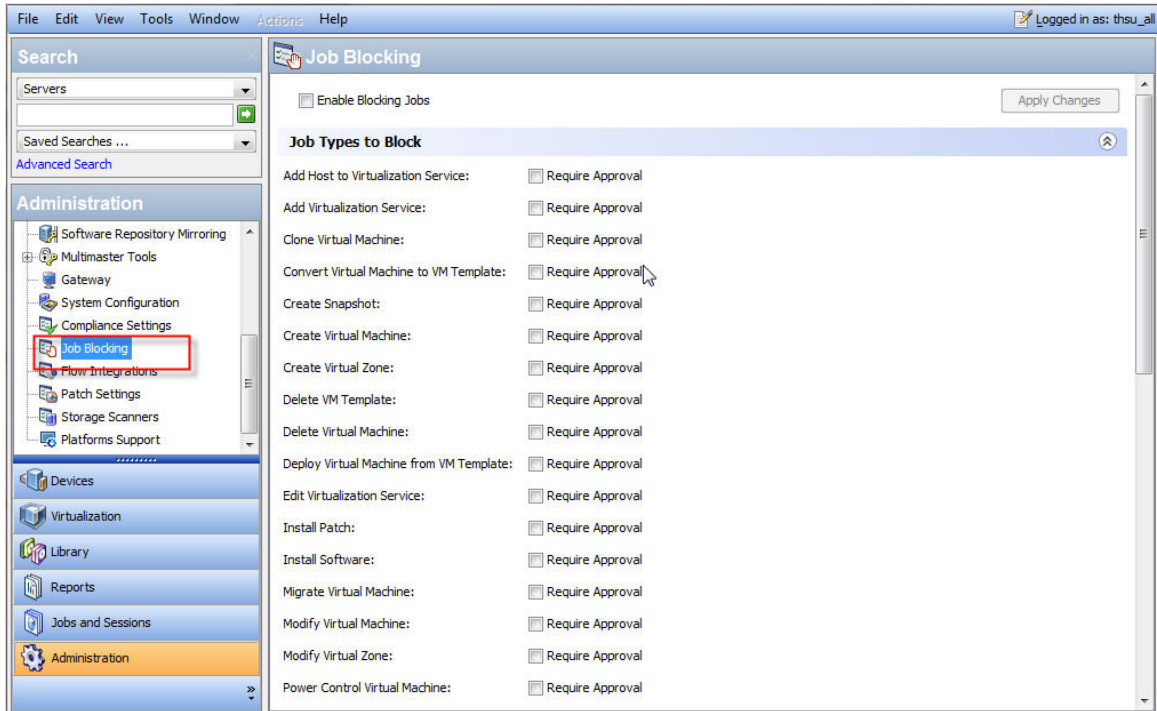
## Possible cause

The Run Server Script job type is blocked in SA.

## Solution

Perform the following steps to unblock the Run Server Script job type from SA:

1. Log in to SA as **Admin**.
2. Navigate to **Administration > Job Blocking**.



3. Unblock the specified job.

Problem: A **Scan/Remediate** job against **Resource Access Through SA** failed with the Expected a character buffer object error.

## Symptom

The **Scan/Remediate** job against **Resource Access Through SA** failed with an exception such as the following:

Traceback (most recent call last):

File "/opt/hp/itocSAadapter/adapter.py", line 362, in <module>

```
main()
File "/opt/hp/itocSAadapter/adapter.py", line 358, in main
start_adapter()
File "/opt/hp/itocSAadapter/adapter.py", line 340, in start_adapter
redirect_output_and_exit(get_job_output(twist, sys.argv[5], job_ref))
File "/opt/hp/itocSAadapter/adapter.py", line 140, in redirect_output_and_exit
sys.stdout.write(output.tailStdout)
TypeError: expected a character buffer object
```

## Possible cause

While the HPE ITOC **Scan/Remediate** job is running on the SA managed resource, other SA jobs are running on the same SA managed server.

## Solution

Wait for the SA jobs to complete. Then from ITOC, rerun the **Scan/Remediate** job against the SA managed resource.

## Uninstallation issues

**Problem:** Invoking an HPE ITOC uninstallation results in an error.

### Symptom

When you run `#<install_dir>/ITOC_Installation/Uninstall_HPITOC`, an error message appears, and uninstallation fails.

### Failure message

No Java virtual machine could be found from your PATH environment variable. You must install a VM prior to running this program.

### Solution

Set the environment variable and retry:

```
$ export PATH=<install_dir>/openjre/bin:$PATH  
$ <install_dir>/ITOC_Installation/Uninstall_HPITOC
```

**Problem:** After uninstalling HPE ITOC on a setup that has ITOC-included PostgreSQL, you may find an orphaned PostgreSQL process.

## Symptom

During uninstallation, HPE ITOC services are stopped before uninstalling the PostgreSQL database, but there may be open connections to it through other clients. The uninstallation process removes what it can.

## Solution

Kill the PostgreSQL process manually after uninstallation.

# Identity Management troubleshooting

## Setting log severity

1. Open the `.../idm-service.war/WEB-INF/classes/log4j.properties` file in a text editor.
2. On the first line, change `INFO` to `DEBUG` (if `DEBUG` already appears on the first line, then log severity is already set to `DEBUG`, and no edit is needed).

**Before**

```
log4j.rootLogger=INFO, consoleAppender, jbossAppender, tomcatAppender
```

**After**

```
log4j.rootLogger=DEBUG, consoleAppender, jbossAppender, tomcatAppender
```

3. Save changes.
4. Restart the organization administration service.





## Logs

To troubleshoot, start at the log level. Logs are located on your server, as shown:

```
<itoc_install_directory>/logs
```

- `installer` – All installer-related logs.
- `portal` – All UI-related logs.
- `salt` – All remote execution-related logs.
- `server` – All application-related logs.

The Importer creates logs on any import. These logs are located here:

```
itoc_install_directory/importer/logs
```

For information about changing the log level to see the "System Configuration" chapter in the *HPE ITOC Administration Guide*.

## Change the remote execution log level

1. Navigate to the following log file:  
`itoc_install_directory/salt/etc/salt/master`
2. Uncomment the `#log_level_logfile: warning` line.
3. Set the level as explained in the file, as needed.
4. Restart the ITOC service.

See the "Start, stop, and check service status" chapter in the *HPE ITOC Installation Guide*.

To change the remote execution logging level on agents:

1. Navigate to the following file:  
`itoc_install_directory/etc/salt/minion`
2. Uncomment the `#log_level_logfile: warning` line.
3. Set the level as explained in the file, as needed.
4. Restart the agent service.

## Enable Hibernate SQL logging

To enable Hibernate SQL logging, change the following OOTB configuration in the `application.properties` file from `false` to `true` :

```
spring.jpa.show_sql=true
```

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