

HP Propel

Software Version: 1.10



Troubleshooting Guide

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Catalog

- Problem: Offerings are not shown in MPP
- Problem: Catalog long response times
- Problem: Request hangs in Submitted state
- Problem: Request hangs in unexpected state
- Problem: Subscription hangs in unexpected state
- Problem: Subscription/request state is different in aggregated CSA operation console than in Propel MPP
- Problem: Subscription is not created

Problem: Offerings are not shown in MPP

Symptoms	Even though offerings have been published to a catalog, after logging in to MPP they are not shown.
Primary software component	CCUE Catalog
Product specific notes	None
Failure message	Expected offerings are not shown in MPP
Probable cause	Common causes of this behavior: <ul style="list-style-type: none">• User is logged in to organization that does not have access to the catalog that the offerings were published to.• Access Control not set properly.• The offerings have been unpublished.• The offerings were never published.

Solution:

There can be several reasons for causing this behaviour:

- User is logged in to organization that does not have access to the catalog that the offerings were published to: Compare organization you are logging in (displayed on MPP logging page) with organization name on detail of catalog in SMC.
- Access Control not set properly: Every catalog except Global Shared Catalog has associated set of Groups. Only Persons from these groups can see offerings published to the catalog. Check Access Control tab on Catalog detail in SMC. If there is not associated any group to catalog, nobody can see any of the published offerings.
- The offerings have been unpublished or the offerings were never published: Publish the offerings to the appropriate catalog(s).

Problem: Catalog long response times

Symptoms	Catalog pages load very slow. The Catalog machine CPU might be high, but this is not always the case.
Primary software component	CCUE Catalog
Product specific notes	None
Failure message	Catalog pages load very slowly
Probable cause	It's hard to identify cause of this problem. Can be database problem (statistics are not updated or the data doesn't correspond to what the catalog was tested for), can be GC problem etc.

Solution:

Here are common issues and how to address them:

- JVM Heap is not properly sized.
 - If you are lucky you get OOM in server.log on Tenured space (Java.lang.OutOfMemoryError: Java heap space) or on Perm space (java.lang.OutOfMemoryError: PermGen space). Basic solution is to use -XmxSSSm for the Tenured space and -XX:MaxPermSize=SSSm for permanent space. SSS must be larger than currently set. Would be great if you report problem anyway including heap dump. Add -XX:+HeapDumpOnOutOfMemoryError to JVM start up parameters, the heap is dumped on OOM. Send us this file, don't forget to compress it and describe when it happened and what data you had.
 - Pages are loading slow, JVM fully utilizes one or more CPU cores. This is usually caused by GC algorithm trying to find enough sized block of memory. The alg is going though heap trying to compact it. This can be easily identify from GC log. You can switch this log by adding -verbose:gc to JVM star up parameters. You can send us the log for analysis, but you can do the analysis on your own. Download GCViewer and check how much time is spent in major GC. This is the time where JVM utilizes CPU but is not serving request. Set -Xmx then.
- Deadlock, or waiting for some resource like DB, file system, etc. - CPU is not utilized, requests are severed slow and not at all. Do stack trace dump then. To do so, press Ctrl+Break on console where the JVM process is running or do kill -QUIT <pid>. If there is JVM level deadlock you will see immediately, at the end of the stack trace is message that there is a deadlock. Anyway send us the dump and we will analyse it.
- Other issues will require more advanced analysis and we can lead you to pinpoint the cause.

Problem: Request hangs in Submitted state

Symptoms	After submitting an order request, the request hangs in Submitted state. The SM or CSA request, however, has been successfully finished.
Primary software component	CCUE Catalog
Product specific notes	None
Failure message	Order requests hangs in Submitted state
Probable cause	It is likely that something went wrong with fulfilment, probably in SX. In this case check server.log and sx.log.

Solution:

If it appears something went wrong with fulfilment, check server.log and sx.log files for more information.

Problem: Request hangs in unexpected state

Symptoms	A submitted request ends in an unexpected state.
Primary software component	CCUE Catalog
Product specific notes	None
Failure message	Request in unexpected state
Probable cause	It is likely that something went wrong with fulfilment, probably in SX. In this case check server.log and sx.log.

Solution:

If it appears something went wrong with fulfilment, check server.log and sx.log files for more information.

Problem: Subscription hangs in unexpected state

Symptoms	Subscription hangs in unexpected state
Primary software component	CCUE Catalog
Product specific notes	None
Failure message	Subscription hung in unexpected state
Probable cause	It is likely that something went wrong with fulfilment, probably in SX. In this case check server.log and sx.log.

Solution:

If it appears something went wrong with fulfilment, check server.log and sx.log files for more information.

Problem: Subscription/request state is different in aggregated CSA operation console than in Propel MPP

Symptoms	In Prople portal service request is PENDING while CSA Opreation Console reports IN_PROGRESS.
Primary software component	CCUE Catalog
Product specific notes	None
Failure message	Subscription/request state differs from CSA operation console to Propel MPP
Probable cause	Way that request/subscription states are mapped from CSA to Propel Portal. This is not an error. See Solution below for more information.

Solution:

This discrepancy is caused by the mapping of request/subscription states from CSA to Propel Portal. Propel portal tries to simplify this information for the user whereas CSA Operation Console shows state in more detail. This is not an error, but this information is included in the troubleshooting content because there have been many questions from users about this.

Problem: Subscription is not created

Symptoms	After submitting an order request, the Subscription is not created.
Primary software component	CCUE Catlog
Product specific notes	None
Failure message	Expected subscription is not created
Probable causes	<ul style="list-style-type: none"> • SX was not properly configured for interacting with CSA or SM. • Propel user management is not properly configured. • With SM Change Offerings (changes in SM), perhaps the particular user can't order a Change more than once.

Solution:

A number of situations can cause this behavior.

- SX was not properly configured for interacting with CSA or SM: Check server.log and especially sx.log, you probably forgot to configure SX to know about the CSA or SM you have aggregated offerings from.
- Propel user management is not properly configured: The identity integration between Propel and backend systems is done by user name comparison. Verify that configured Propel LDAP is the same as the LDAP configured in SX or CSA.
- With SM Change Offerings (changes in SM), perhaps the particular user can't order a Change more than once: This is an SM limitation

Catalog Aggregation

- Problem: HP SM WebServices Not Installed
- Problem: Aggregation is in Pending State for long time for SM Adapter
- Problem: Offerings Not Aggregated
- Problem: Unable to validate adapter configuration
- Problem: Aggregation remains pending or fails
- Problem: Icons not aggregated correctly

Problem: HP SM WebServices Not Installed

Symptoms	Getting error: HPPropelAggregation webservice not found.
Primary software component	Catalog Aggregation
Product specific notes	None
Failure message	HPPropelAggregation webservice not found
Probable cause	When doing Service Management (SM) aggregation, it is possible that SM does not have HPPropelAggregation webservice installed. When this is the problem you will see HPPropelAggregation webservice not found.

Solution:

Following Propel documentaiton, check to see if HPPropelAggregation webservice is installed. If not, install it.

Problem: Aggregation is in Pending State for long time for SM Adapter

Symptoms	When performing an aggregation, aggregation status can be in pending for a long time.
Primary software component	Catalog Aggregation
Product specific notes	None
Failure message	Not applicable
Probable cause	While aggregating from SM, the host machine can take a long time to communicate.

Solution:

Increase SO_Timeout and Connection_Timeout values in SM Adapter properties to increase aggregation soap call wait time.

Problem: Offerings Not Aggregated

Symptoms	When aggregating from HP CSA, offerings appear in CSA but are not aggregated into the HP Propel catalog. Log messages say no offerings found.
Primary software component	Catalog Aggregation
Product specific notes	None
Failure message	Log message: No offerings found
Probable cause	<ul style="list-style-type: none">• Not aggregating from correct HPCSA organization.• No using an HP CSA user with permission to see the offerings.

Solution:

Verify that you are aggregating from correct CSA organization, and using a csa user with permission to see the offerings.

Problem: Unable to validate adapter configuration

Symptoms	While adding SM or HP CSA adapter error "Unable to validate adapter configuration" is encountered.
Primary software component	Catalog Aggregation
Product specific notes	None
Failure message	Unable to validate adapter configuration
Probable cause	There can be many reasons for this error: <ul style="list-style-type: none">• Hostname, user and password are correct. Check aggregation.log to see if one of these properties is causing there error.• For HP CSA adapter, csa user specified in properties does not have access to the HP CSA organization specified in properties.• Certificates are not being exchanged between the catalog host machine and SM source or HP CSA source host.

Solution:

- Verify that hostname, user and password are correct. Check aggregation.log to see if one of these properties is causing there error.
- For CSA adapter, check to see if the csa user you are specifying in properties has access to the csa organization specified in properties.This problem can be identified in aggregation.log check the log.
- Verify that certificates are exchanged between the catalog host machine and SM source or HP CSA source host.

Problem: Aggregation remains pending or fails

Symptoms	Aggregation fails or is indefinitely pending.
Primary software component	Catalog Aggregation
Product specific notes	None
Failure message	Aggregation fails or is indefinitely pending.
Probable cause	There can be many reasons for this problem. See solutions below for possible ideas.

Solution:

There can be many reasons for this problem.

- Check the aggregation.log and server.log files for errors.
- View the REST calls information to verify that they are returning correct data.

Problem: Icons not aggregated correctly

Symptoms	Icons are not aggregated correctly
Primary software component	Catalog Aggregation
Product specific notes	None
Failure message	Icons are not aggregated correctly.
Probable cause	HP CSA source host or SM source host has an underscore (_) in its name.

Solution:

Change the source host name to eliminate this problem.

Identity Management (IdM)

- Problem: Complex user search filter fails
- Problem: Keystone Project Name Restriction
- Problem: Invalid Tokens In HA Deployment or Multiple Server Deployment
- Problem: Login Page Loop
- Problem: US DoD SSL Configuration
- Problem: Ensure all servers have same system time
- Problem: Invalid SSL Certificate
- Problem: NoSuchMethodError Exception in org.apache.http.client
- Problem: Context Initialization Fails (IdM 1.5.0 and later)
- Problem: Multiple Login Prompts When Accessing MPP via SSO

Problem: Complex user search filter fails

Symptoms	Using a complex LDAP query (e.g., (<code> (mail={0})(uid={0})</code>)) fails, but simple LDAP queries (e.g., <code>uid={0}</code>) work fine.
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Primary software component	IdM
Product specific notes	None
Failure message	Complex LDAP query (e.g., (<code> (mail={0}) (uid={0})</code>)) fails.
Probable cause	<p>In CSA 4.0, using a complex LDAP query for the user search filters only works when LDAP server is running Active Directory. The following conditions cause the issue to manifest:</p> <ul style="list-style-type: none"> • User has configured a complex LDAP query for the user search filter • The organization's LDAP server is not running Active Directory • Only occurs on CSA 4.0 MR, more specifically, IdM 1.0.0 • To verify IdM version, look in <code>.../idm-service.war/WEB-INF/lib</code>. If <code>idm-*</code> JAR filenames indicate version 1.0, this installation has the user search filter defect.

Solution:

- Option 1: Install CSA 4.01
- Option 2: Install IdM 1.0.1 in place of IdM 1.0.0 (manual process: no hotfix has been released)
 1. Delete `idm-service.war` directory (optionally save off `applicationContext.properties` and `applicationContext.xml` to retain configuration).
 2. Obtain IdM 1.0.1 WAR from Nexus
 3. Replace identity service
 - a. Expand IdM 1.0.1 WAR file in a temporary work area in directory named `idm-service.war`.
 - b. If configuration was saved off, move those files into place.
 - c. Move `idm-service.war` directory from temporary area to `standalone/deployments` directory where original version was found.

Problem: Keystone Project Name Restriction

Symptoms	<p>Keystone project name is restricted and manifests itself as:</p> <ul style="list-style-type: none"> • Keystone operations are performed by a transport user. • Invoking the IdM authentication API directly (via Postman or RESTClient) returns a structure that does not include a <code>secondaryToken</code> property.
Primary software component	IdM
Product specific notes	None
Failure message	<ul style="list-style-type: none"> • Keystone operations are performed by a transport user. • Invoking the IdM authentication API directly (via Postman or RESTClient) returns a structure that does not include a <code>secondaryToken</code> property.

<p>Probable cause</p>	<p>In CSA 4.0 and 4.01, when integrating with Keystone (OpenStack, CloudOS, or CloudSystem 8), for Keystone actions to be performed on behalf of the CSA user who initiated them, the CSA user must have a matching username/password in a Keystone project whose name exactly matches the CSA user's organization ID.</p> <p>Anything that interferes with IdM-Keystone communication can manifest in this way. However, the following conditions cause the Keystone project name issue to manifest:</p> <ul style="list-style-type: none"> • CSA-Keystone (OpenStack / CloudOS / CloudSystem 8) integration is configured. • The Keystone project name for the user in question does not exactly match the CSA organization ID for that user. This comparison is case sensitive. The CSA organization ID is typically all upper case and has no spaces.
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Solution:

Rename the Keystone project to match the CSA organization ID.

Problem: Invalid Tokens In HA Deployment or Multiple Server Deployment

Symptoms	Invalid Tokens In HA Deployment or Multiple Server Deployment
Primary software component	IdM
Product specific notes	None
Failure message	<ul style="list-style-type: none"> • Tokens are found to be expired upon creation. • Tokens computed to be valid on one system are found to be expired on another.
Probable cause	<p>In any deployment involving multiple servers, all servers must have the same system time. If servers have different system times, tokens may be valid on one server but not another as they approach their expiration timestamp. With sufficient time drift, short-lived tokens may be invalid upon creation.</p>

Solution:

Any difference in system time among servers working together can contribute to this problem. The smaller the time difference, the less noticeable the problem.

Steps to correct

- Synchronize time on all servers. Network time protocol (NTP) is the recommended approach, but manual synchronization may be sufficient in non-production use cases.
- It is recommended that all servers be placed in the same time zone, ideally UTC.

Problem: Login Page Loop

Symptoms	The login page may appear to continually refresh, preventing the user from entering credentials and logging in. This issue typically manifests in the following way: <ul style="list-style-type: none"> As soon as or shortly after the login page renders, it refreshes.
Primary software component	IdM
Product specific notes	None
Failure message	Login page continually refreshes.
Probable cause	<ul style="list-style-type: none"> One or more token lifetimes is set to values that are too short to be practical. By default, the request token lifetime is 5 minutes and the authentication token lifetime is 30 minutes. Clock skew may cause tokens to expire unexpectedly. If the difference in system time exceeds the token lifetime, tokens may appear expired even at the moment they are created.

Solution:

- Verify that token lifetimes are set to reasonable values. Authentication token lifetimes are set in the `lifetimeMinutes` property of the `tokenFactory` bean in `applicationContext.xml`. Request token lifetimes are set in the `lifetimeMinutes` property of the `tokenService` bean in `applicationContext.xml`. The time that request tokens are retained in the data store is set in the `lifetimeMinutes` property of the `tokenStore` bean in `applicationContext-common.xml`.
- Verify that the system clocks for all servers involved in a deployment are roughly synchronized. Network Time Protocol (NTP) is probably the easiest way to synchronize system clocks and ensure that they remain synchronized.

Problem: US DoD SSL Configuration

Symptoms	US DoD SSL has specific configuration requirements.
Primary software component	IdM
Product specific notes	None
Failure message	None
Probable cause	The US Department of Defense (DoD) uses slightly different procedures related to SSL certificates than is required when using commercially signed SSL certificates.

Solution:

The US Department of Defense (DoD) uses slightly different procedures related to SSL certificates than is required when using commercially signed SSL certificates. In general, where a commercial CA-signed certificate is used, a DoD customer should use the DoD CA root certificate. In general, DoD customers use FIPS, which requires keystores and truststores to be in PKCS12 format, but there are exceptions that use JKS format. Following are the recommended documentation changes for handling DoD SSL configuration.

We are able to solve the issue by providing the CA's Root certificate path for the provider and `idmProvider ca` attribute value. Basically if I see the doc it says we need to provide the CA-signed certificate for the `ca` attribute value but it has to be CA's Root certificate. And which solved the issue.

The following are the items which are either need to be changed in the doc or need to be added. The document which is needed to be modified is "HP_CSA_400_Configuration_Guide_Windows.pdf"

Chapter 5 -> Advanced Configuration and Integration -> Configure SSL for Client Browsers -> Configure HP CSA to Use a Certificate Authority-Signed or Subordinate Certificate Authority-Signed Certificate -> Configure the Marketplace Portal

Currently the doc says:

This step configures the Marketplace Portal to use the Certificate Authority-signed certificate.

1. Open the %CSA_HOME%\portal\conf\mpp.json file in a text editor.
2. Update the ca attribute value for the provider. Enter the path to the SSL certificate file that you imported in step 5. For example, C:\csa_ca_signed.crt.
3. Update the ca attribute value for the idmProvider. Enter the path to the SSL certificate file that you imported in step 5. For example, C:\csa_ca_signed.crt.

Need to change as :

This step configures the Marketplace Portal to use the **Certificate Authority's Root Certificate**.

1. Open the %CSA_HOME%\portal\conf\mpp.json file in a text editor.
2. Update the ca attribute value for the provider. Enter the path to the SSL certificate file that you imported in step 4. For example, **C:\csaca.crt**.
3. Update the ca attribute value for the idmProvider. Enter the path to the SSL certificate file that you imported in step 4. For example, **C:\csaca.crt**.

Add the following steps to the documentation:

Copy the CSA keystore to the mpp/conf folder and converting the keystore to the PKCS12 format. For example,

```
keytool.exe -importkeystore -srckeystore .\jboss-as-7.1.1.Final\standalone\configuration\keystore_ca_signed -storetype PKCS12 -destkeystore .\portal\conf\csa_mpp_keystore
```

Provide this keystore to the mpp.json file along with the password. For example,.

```
"https": {  
  "enabled": true,  
  "options": {  
    "pfx": "../conf/csa_mpp_keystore",  
    "passphrase": "changeit"  
  }  
},
```

For HP internal readers, the [attached e-mail message](#) describes the recommended documentation changes for handling DoD SSL configuration, as shown above.

Problem: Ensure all servers have same system time

Symptoms	Numerous problems have been noted when there is clock skew between servers involved in a CSA or Propel system, for example, unable to log into MPP, tokens expire earlier or later than expected, or token validation fails inconsistently.
Primary software component	IdM
Product specific notes	None
Failure message	Various problems

Probable cause	Clocks on servers differ.
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Solution:

Please ensure that all servers have the same system time. Configuring all servers to synchronize their time to an official time source via network time protocol (NTP) is probably the easiest and best way to achieve this.

Problem: Invalid SSL Certificate

Symptoms	<p>Invalid SSL certificates that manifest themselves in a number of ways. These have been encountered:</p> <ul style="list-style-type: none"> • Unable to reach MPP login page ("Oh no, something went wrong!" or "This webpage has a redirect loop") • <code>ResourceAccessException</code> in log file (with or without call stack) • PKIX exceptions • Exceptions that specifically mention that the hostname in the server's certificate doesn't match the hostname used to access the server
Primary software component	IdM
Product specific notes	None
Failure message	<Description>
Probable causes	<ul style="list-style-type: none"> • Certificates installed with CSA 3.x expired in October 2012; upgrade to CSA 4.0 didn't install new certificates so they were expired from the beginning • Attempt to access CSA server from IdM using <code>localhost</code> instead of fully qualified domain name (FQDN), e.g., <code>ccue-idm-csa3.hpswlab.adapps.hp.com</code> • Attempt to access IdM server from MPP using <code>localhost</code> instead of fully qualified domain name (FQDN), e.g., <code>ccue-idm-csa3.hpswlab.adapps.hp.com</code> • Attempt to access CSA server by IP address when certificate does not have IP address in <code>subjectAltName</code> attribute. • Attempt to use expired certificate

Solution:

- Option 1: Disable SSL certificate validation (masks the problem, not recommended for production)
 1. Set `idm.ssl.requireValidCertificate` to `false` in `applicationContext.properties` (`.../idm-service.war/WEB-INF/spring`)
- Option 2: Fix the problem.
 1. Verify that name resolution (DNS, `/etc/hosts`, `C:\Windows\system32\drivers\etc\hosts`) allows IdM to reach CSA by fully qualified domain name.
 - a. Use common tools, such as `curl`, `ping`, `nslookup`, or a web browser to access CSA by its fully qualified domain name
 - b. If it fails, verify that the DNS for the CSA server is correct (customer's admin probably has to do this); could add entry in `/etc/hosts` (UNIX) or `C:\Windows\system32\drivers\etc\hosts` for CSA server's FQDN.
 2. Create a valid certificate
 - a. See the HP CSA 4.0 Configuration Guide in [CSA 4.0 documentation](#).

Problem: NoSuchMethodError Exception in org.apache.http.client

Symptoms	NoSuchMethodError Exception in org.apache.http.client.
Primary software component	IdM 1.2.0 and later
Product specific notes	None
Failure message	<ul style="list-style-type: none">The identity service fails to start with a number of exceptions, including a <code>NoSuchMethodError</code> exception related to a class under <code>org.apache</code>, generally <code>org.apache.http.client.utils.URLEncodedUtils</code>.The identity service throws a <code>NoSuchMethodError</code> exception related to a class under <code>org.apache</code>, generally <code>org.apache.http.client.utils.URLEncodedUtils</code> during MPP login.
Probable cause	The Apache HTTP Components JAR files in the JBoss installation have not been updated.

Solution:

The addition of HP SSO support in IdM 1.2.0 requires Apache HTTP Components version 4.2.5. JBoss 7.1.1.Final ships with version 4.1.2, which is missing a method required by HP SSO. Unfortunately, it seems that if JBoss includes a JAR for a particular library, it overrides any similar JAR file that a service might attempt to use.

Steps to confirm:

- Go to the `.../jboss-as-7.1.1.Final/modules/org/apache/httpcomponents/main` directory. Verify that `httpclient-?.?.?.jar`, `httpcore-?.?.?.jar`, and `httpmime-?.?.?.jar` are present. Use `javap` to inspect the `httpclient-?.?.?.jar` JAR file.

Inspect httpclient JAR File

```
$ javap -classpath httpclient-?.?.?.jar org.apache.http.client.utils.URLEncodedUtils
```

- Inspect the output. If it's the correct version, it should include the following method signature:

Inspect javap Output

```
public static java.lang.String format(java.lang.Iterable<? extends org.apache.http.NameValuePair>, java.nio.charset.Charset);
```

Steps to correct:

- Option 1: Get a new CSA installer that includes the correct versions of the Apache HTTP Components modules.
- Option 2: Replace the `httpclient-?.?.?.jar`, `httpcore-?.?.?.jar`, and `httpmime-?.?.?.jar` files in `.../jboss-as-7.1.1.Final/modules/org/apache/httpcomponents/main` with the following files: `httpclient-4.2.5.jar`, `httpcore-4.2.5.jar`, `httpmime-4.2.5.jar`

Problem: Context Initialization Fails (IdM 1.5.0 and later)

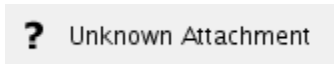
Symptoms	<p>In the jboss deployments directory (i.e. /opt/hp/propel/jboss-as/standalone/deployments) the deployment file for the IdM Service will have the .failed extension. If opened in a text editor it will look something like:</p> <div data-bbox="867 327 1440 814" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">idm-service.war.failed example</p> <pre> {"JBAS014653: Composite operation failed and was rolled back. Steps that failed:" => {"Operation step-2" => {"JBAS014671: Failed services" => {"jboss.web.deployment.default-host./ idm-service" => "org.jboss.msc.service.StartException in service jboss.web.deployment.default-host./id m-service: JBAS018040: Failed to start context"}}}} </pre> </div> <p>The stack trace and ERROR messages will be found in the server log (i.e. /opt/hp/propel/jboss-as/standalone/log/server.log). See the failure message below for an example excerpt from this file.</p>
Primary software component	IdM 1.5.0 and later
Product specific notes	None
Failure message	<div data-bbox="867 1104 1440 1713" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">server.log example</p> <pre> . . . Mon, 23 Jun 2014 14:10:47,489 INFO [org.jboss.as.connector.deployers.jdbc c] (MSC service thread 1-3) JBAS010404: Deploying non-JDBC-compliant driver class org.postgresql.Driver (version 9.3) Mon, 23 Jun 2014 14:10:50,129 ERROR [org.springframework.web.context.Cont extLoader] (MSC service thread 1-3) <Stack trace not included here due to its length.> </pre> </div>

Probable cause	<p>Beginning in IdM Service 1.5.0 a persistent data storage (database) backend is now used in order for the IdM Service to manage and store Organization and Authentication Provider Configuration details within the IdM Service itself. Because of this, the context initialization of the IdM Service requires that the persistent data store be up and running, and the configuration details in the applicationContext.properties file be accurate.</p> <p>The actual issue is that the database connection isn't valid. This can be an issue in a variety of ways: the database is local but not up and running; the database is remote and access is blocked; the database is remote and network is down; the database configuration in the applicationContext.properties file is incorrect.</p>
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Solution:

Connectivity Issues

First, ensure that a connection to the database is possible. This can be done using a database client as long as it has the correct drivers for the database type and the correct connection string. Resolve any and all connectivity issues before going further. Below is an example for connecting the [Squirrel SQL Client](#):



Configuration Issues

Locate the applicationContext.properties file and verify the configuration details. The file will be located somewhere like /opt/hp/propel/jboss-as/standalone/deployments/idm-service.war/WEB-INF/spring/applicationContext.properties. The database connection properties should look like the following:

applicationContext.properties example

```
45 # Properties for properly configuring the database access. Each line has the
following format:
46 #
47 #     hibernate.property_name=property_value
48
49 # Database connection settings
50 idm.persistence.connection.driver.class = org.postgresql.Driver
51 # Update this url to have your correct information
52 idm.persistence.connection.url = jdbc:postgresql://<database host>:<database
port>/<database name>
53 # Database connection user settings
54 idm.persistence.connection.username = <username>
55 idm.persistence.connection.password = <password>
56 # JDBC connection pool (use the built-in)
57 idm.persistence.connection.pool_size = 10
58 # The oracle thin driver cannot batch clobs or anything > 4000 characters.
59 # http://forum.hibernate.org/viewtopic.php?t=93527&highlight=multiple
60 # http://www.hibernate.org/56.html
61 idm.persistence.jdbc.batch_size = 0
62 # SQL dialect
63 # Change to commented out version for Hibernate 4.3.4.Final
64 # hibernate.dialect=org.hibernate.dialect.PostgreSQL9Dialect
65 idm.persistence.dialect = org.hibernate.dialect.PostgreSQLDialect
66 # Disable the second-level cache
67 idm.persistence.cache.provider_class =
org.hibernate.cache.internal.StandardQueryCache
68 # Echo all executed SQL to stdout
69 idm.persistence.show_sql = false
70 # Drop and re-create the database schema on startup if set to 'create'
71 # Leaves the database schema intact if set to 'update'
72 idm.persistence.hbm2ddl.auto = update
```

Problem: Multiple Login Prompts When Accessing MPP via SSO

Symptoms	Users might multiple login prompts when accessing MPP via SSO
Primary software component	IdM
Product specific notes	None
Failure message	In CSA 4.01, users might see multiple login prompts when attempting to access MPP with SSO (single sign-on) configured.SiteMinder login page is displayed multiple times during login process.
Probable cause	In general, the following conditions cause this issue to manifest: <ul style="list-style-type: none">• SSO (single sign-on) is enabled using CA SiteMinder.• The proxy server (web agent) is specified by IP address rather than fully qualified domain name.

Solution:

- Switch to using the fully qualified domain name instead of IP address.
- Specify the web agent server using its fully qualified domain name.
- Update `mpp.json` to use the fully qualified domain name in the `redirectUrl` and `returnUrl` in the `idmProvider` element.
- Update name resolution
 - If possible, the DNS server should be updated to resolve the web agent server's domain name
 - If DNS cannot be changed, then all servers that need to access the web agent server need to add an association between the web agent server's IP address and its fully qualified domain name in the `/etc/hosts` or `C:\Windows\System32\drivers\etc\hosts` file

Marketplace Portal (MPP)

- Problem: How to view MPP log files and changing logging level
- Problem: The blue error screen is displayed when accessing HP Propel Knowledge Management.
- Problem: The blue error screen is displayed when accessing HP Propel Ticketing.
- Problem: I get the blue error screen while interacting with the Marketplace Portal
- Problem: Some images are not displayed in the consumer portal.
- Problem: Unable to log into the consumer (Marketplace) portal
- Problem: Am not able to review and approve requests.

Problem: How to view MPP log files and changing logging level

Symptoms	How to view MPP log files and changing logging level
Primary software component	MPP
Product specific notes	Propel 1.x
Failure message	
Probable cause	

Solution:

When MPP is deployed on Linux with the Propel stack its logging configuration and log files can be found in the following locations:

- Configuration: `/opt/hp/propel/mpp/conf/mpp.json`
- Logs: `/opt/hp/propel/mpp/logs`

To change the logging level:

- Edit `/opt/hp/propel/mpp/conf/mpp.json` and locate the 'logging' section.
- Restart the MPP NodeJS server with the following commands
 - `service mpp stop`
 - `service mpp start`

Problem: The blue error screen is displayed when accessing HP Propel Knowledge Management.

Symptoms	The blue error screen is displayed when accessing HP Propel Knowledge Management.
Primary software component	MPP

Product specific notes	HP Propel 1.x.x
Failure message	<Blue error screen is displayed.>
Probable cause	<ul style="list-style-type: none"> • The KM microservice is not running • There is a problem with the SM system providing the Knowledge Management API.

Solution:

- Inspect the configuration file /opt/hp/propel/msvc/conf/knowledge.json
 - Verify the SSL configuration.
 - The config file will specify the URL to the provider system. Ensure it is correct.
 - The config file will specify the username and password used to interact with SM. Verify you can log into SM using these credentials.
- If necessary you can restart the Knowledge Management Microservice with the following commands (on the catalog systems)
 - service msvc stop
 - service msvc start

HP internal users: For more information on the Micro Services please read [Micro Services](#).

Problem: The blue error screen is displayed when accessing HP Propel Ticketing.

Symptoms	The blue error screen is displayed when accessing HP Propel Ticketing.
Primary software component	MPP
Product specific notes	Affects only HP Propel 1.x products.
Failure message	Blue error screen is displayed.
Probable cause	<ul style="list-style-type: none"> • The ticketing microservice is not running. • There is a problem with the Service Exchange (SX) system providing the ticketing API.

Solution:

- Inspect the configuration file /opt/hp/propel/msvc/conf/ticket.json
 - Verify the URL to the SX system is correct
 - Verify the SSL configuration is correct
- If necessary you can restart the Ticketing Microservice with the following commands (on the catalog systems):
 - service msvc stop
 - service msvc start

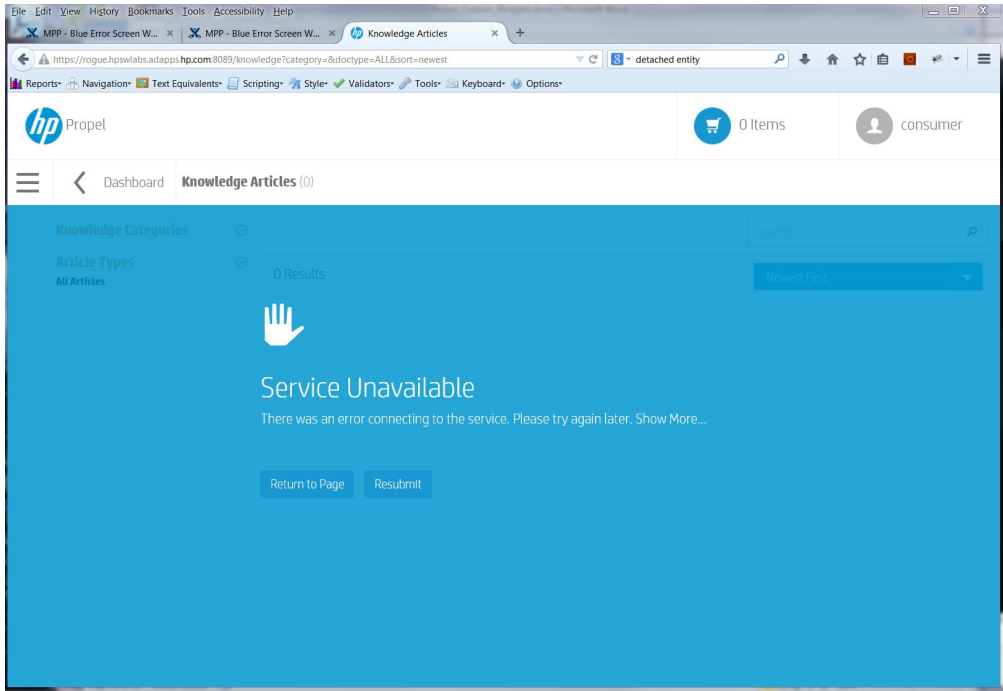
HP internal users: For more information on the Micro Services please read [Micro Services](#).

Problem: I get the blue error screen while interacting with the Marketplace Portal

Symptoms	I get the blue error screen while interacting with the Marketplace Portal (MPP).
Primary software component	MPP

Product specific notes	None
Failure message	<Blue error screen displayed>
Probable cause	This is due to an error response from the server. Check the MPP log to further discern the cause of this problem. Refer to "How to view MPP log files and changing logging level" troubleshooting entry.

MPP has a generic error screen as shown in the image below:



This error screen is seen when the MPP encounters an unexpected error. This particular screenshot was taken when the user clicked on the Knowledge Articles link, while the underlying Knowledge service was unavailable. This is only one example of the type of error that can appear.

Solution:

More details of the specific error will be logged in the MPP log. Check the MPP log to further determine the cause of this problem. Take corrective action based on the cause.

Problem: Some images are not displayed in the consumer portal.

Symptoms	Some images are not displayed in the consumer portal.
Primary software component	MPP
Product specific notes	None
Failure message	<Expected image is not displayed.>
Probable cause	Image URL that is not accessible. This often occurs with aggregated offerings.

Solution:

Verify that the image URL is publicly available. For example, images from the 'blobstore' API are not publicly available.

Problem: Unable to log into the consumer (Marketplace) portal

Symptoms	Consumer login attempts with various users fails
Primary software component	MPP
Product specific notes	<None>
Failure message	Will not be able to log in
Probable cause	<ul style="list-style-type: none">• MPP uses the Identity Management service to validate user credentials. See the Identity Management troubleshooting content.• SSL Certificate issue• Possibly due to misconfiguration of IdM from MPP.• Possibly due to error response from the server. Check the MPP log file for more information.

Solution:

One of the most common log in issues is an invalid SSL certificate, please See the page [IdM Support - Common Issues](#) for more information on SSL certificates.

Also, double check the MPP configuration file mpp.json and verify the following items in the 'idmProvider' section.

- url: is a fully qualified domain name
- returnUrl: is a fully qualified domain name
- ca: path is correct

The reason url and returnUrl must be FQDN's is because the SSL certificates are typically registered that way.

NOTE: If the issue is being caused by a self signed SSL certificate and you are working with a demo or POC environment then you can work around the issue by setting strictSSL to false. However this should not be done in a production environment.

Problem: Am not able to review and approve requests.

Symptoms	Am not able to review and approve requests.
Primary software component	MPP
Product specific notes	None
Failure message	Expect to see requests for approval, but none are displayed.
Probable cause	You are not logged in as a user who has approver permissions.

Solution:

Log in as a user who has approver permissions.

Service Exchange (SX)

- Troubleshooting Tip: Use Self-test to check HP SX configuration
- Problem: Unable to create requests in HP SM under an LDAP user
- Problem: Creating Ticket fails
- Problem: No mail/notification received
- Problem: HP CSA halts creating subscriptions

Troubleshooting Tip: Use Self-test to check HP SX configuration

Use Self-test to check for correct HP SX configurations, connections and file version details. See the "Self-test HP SX configuration" section in the *HP Propel 1.10 Installation and Configuration Guide* for more information.

Problem: Unable to create requests in HP SM under an LDAP user

Symptoms	Unable to log into MPP as an LDAP user or request creation action ends with an error or succeeds but no Request/Notification/Subscription seems to be created.
Primary software component	HP SX
Product specific notes	None
Failure message	Request creation action ends with an error, or succeeds but no Request/Notification/Subscription seems to be created.
Probable cause	If user cannot sign into MPP then it is not SX issue. If user cannot create a request then it is not a SX issue. If request fails then there can be an issue with contacts, for example, HP SM contact for user does not exist

Solution:

In order to be able to create requests in HP SM under an LDAP user, you need to create a contact in HP SM for this user like this:

1. Go to **System Administration > Base System Configuration > Contacts** .
2. Fill in the form (e.g. **Contact name** : <YOUR_NAME> , **Full Name** : <Full Name>, **email** : <email_address@server.com>, **Manager** : <YOUR_MANAGER>)
3. Click Add.

Problem: Creating Ticket fails

Symptoms	Error message encountered when creating a Support Ticket.
Primary software component	HP SX
Product specific notes	None

Failure message	An error such as: "... is not a valid Contact Name in the contacts file (see.view.engine.post.display)."
Probable cause	There is a problem with the permissions of the user trying to create a ticket, for example, the user does not exist.

Solution:

Look at *sx.log* (see above) for errors such as: "... is not a valid Contact Name in the contacts file (se.view.engine.post.display)".

There is a problem with the permissions of the user trying to create a ticket. You need to find the HP SM instance being used for ticketing, then add this user to its Contacts.

To do so:

1. Look at your HP SX configuration file *installer.properties*
2. Find which HP SM instance HP SX is connecting to for Ticketing.
3. Log into that HP SM server.
4. Go to **System Administration > Base System Configuration > Contacts** .
5. Fill in the form.
6. Click **Add** .

Problem: No mail/notification received

Symptoms	The system HP Propel MPP seems to work and orders are created, but no notification (approval, confirmation ...) emails are received by the appropriate respondents.
Primary software component	HP SX
Product specific notes	None
Failure message	
Probable cause	<ul style="list-style-type: none"> • Email address for notifications is incorrect. • Email server settings are wrong.

Solution:

1. Find and look at the appropriate **OO Flow** , see **OO FLOWS** for details.
2. View the OO Flow's **input parameters** . There should be one containing the **email address** , to which the notification mail is sent.
3. Check that this email address is correct and suits your needs.
4. Check the **email (SMTP) server settings** in the *installer.properties* file.

Problem: HP CSA halts creating subscriptions

Symptoms	Subscriptions blocked (pending) for more than a couple of minutes
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Primary software component	HP SX
Product specific notes	None
Failure message	<Description>
Probable cause	When subscriptions seem to be blocked (pending) for more than a couple of minutes check the HP CSA and HP SX server time settings. If they differ by more than a couple of minutes and the requests were created in the time just before the end of the day (before midnight), then HP CSA waits to create the subscriptions exactly for the length of time that is the time difference between the two servers.

Solution:

Synchronize the time on HP SX and HP CSA server machines.

HP Propel 1.10 Troubleshooting Flow

The following flow diagram is provided to assist you in determining where in the HP Propel product you are encountering an issue. You can search the Troubleshooting Guide for keywords related to your issue, e.g. an error message you are seeing, but this diagram is provided as alternative method of troubleshooting.

