

Micro Focus Operations Bridge Upgrade Version Check Tool

Overview of the utilities being made available to aid in identifying the installed components and configuration of Operations Bridge Manager

Date: 9th December 2020
Author: Andy Doran (andy.doran@microfocus.com)
Revision: 2020.12.09
Location: <https://marketplace.microfocus.com/itom/content/opsb-version-check-tools>

Support for: Operations Bridge Manager Classic 10.12, 10.60, 10.61, 10.62, 10.63, 10.70, 2018.05, 2018.11, 2019.02, 2019.05, 2019.11, 2020.05, 2020.10

This tool will provide you with valuable information for your upgrade planning to classic OBM 2020.10. OBM 2020.10 provides a Flash-independent user interface for Operational and administration tasks. Running a Flash-independent version of OBM by end of calendar year 2020 is very important if your company is following the Adobe Flash-Player removal initiative. Otherwise, please make sure that you can still run Adobe Flash-Player in your browsers beyond end of 2020.

In case you need more information about the Micro Focus Operations Bridge Evolution program, please contact your Micro Focus Support liaison, or send an email to:

OpsBEvolution@MicroFocus.com

Contents

Background	3
Overview of the Utility	4
Current Checks	4
Requirements	5
Using the Utility	6
Using opr-version-check.pl	7
Examples	8
All online checks	8
OBM Version checks	8
Management Pack Checks	9
Indicator Mapping Rules	10
UCMDB Content Packs Check	11
Preparing Offline files	11
Using “opr-checker”	11
Using “opr-support-utils”	12
Obtaining Management Pack Information	13
APM Check Utility	14
Examples	15
Running on a Gateway Server on Windows	15
Running on a Gateway Server on Windows	15
Running on Windows system (not a Gateway server)	15
Using the _netrc File	16
OBR Check Utility	17

Background

Micro Focus Operations Bridge (OpsBridge) is a suite of products that monitors IT environments and consolidates data from other monitoring tools, since Operation Bridge Manager (OBM/OMi) often used as single plane of glass in large IT organizations. Due to the nature of the OpsBridge suite and the potential huge list of integrated products, upgrade planning and execution could become tricky – e.g. understanding what components are installed, what versions and the overall configuration.

The Upgrade Version Check Tool (opr-version-check) is an evolving utility that aims to simplify the process of identifying what has been installed as an aid to the upgrade process, as well as highlighting where components may be out of date. The tool is provided by the ITOM Customer Success team with “community support” via ITOM Marketplace.

There are several Perl scripts provided that can be executed on either a Linux or Windows platform. Some of these need to run “live” (“online”), but others can also run “offline” if the information that they process has been gathered previously. A single driver script (opr-version-check.pl) is used to invoke each additional script as required.

Overview of the Utility

Current Checks

The Upgrade Version Check Tool currently collects/reports on the following information:

Area/Category	Explanation	Offline?
OBM/OMi Version	The installed OBM/OMi version and patches installed. If the version found is not the currently available version, this is highlighted.	yes
O/S Information	The O/S and version installed where the component (i.e. Gateway Server or Data Processing Server)	yes
Server Role	The role(s) of the server (i.e. Gateway server)	yes
License Information	The installed licenses – where a license is expired or fully consumed, this is highlighted.	yes
Database Server	The database server type (i.e. PostgreSQL, Oracle or MS SQL Server) and host along with connection information.	yes
Management Packs	The installed Management Packs along with their versions (this will include a check to see if they MP is the current version)	yes
Database Server Detail	The Database Server type and Version	no
Count of Gateway Servers	The number of Gateway Servers configured	no
Data Processing Servers	The number of Data Processing Servers configured	no
Dual Role Servers	Notification of the number of servers with both GW and DPS roles	no
Connected Servers	Information about the connected serves configured	no
Users	Count of OBM users – count of those which are “SuperAdmin”	no
Connectors	Information about installed connectors and the agents that they are running on	no

Where “Offline” is supported, this means that the information can be gathered using the utilities available on the Gateway and Data Processing Servers (DPS). These can be used to generate files which can be processed by the Upgrade Version Check Tool. If a category is not marked as being available offline, then it can only be processed by running on a Gateway or DPS server.

Note: For the online database checks to be made, Java needs to be available on the system that is running the checker tool. If Java is not available, the database checks will not be made.

Requirements

The scripts are all written in Perl. On Linux, this means that the Perl module must be installed. This is a pre-requisite for installing the OBM server components, and so should be present. To install the Perl module if required, refer to the documentation for the Linux platform being used. For example, on RedHat:

```
yum install perl -y
```

On Windows, Perl will need to be installed unless the OpsBridge Operations Agent is installed (the OA provides a Perl engine and if this is detected can be used by the scripts). If the scripts are to be executed from a Windows system without an OA present (for example when running to process offline files), then a Perl engine such as ActivePerl must be installed. This is available from:

<https://www.activestate.com/products/perl/downloads/>

If the OA Perl engine is to be used, a batch file (oaper.bat) is provided which will locate the Perl engine. Usage is described in the next section.

Using the Utility

The Upgrade Version Check Tool is provided as a zip file which should be unzipped either to Windows or Linux. Once unzipped, the script that drives the process is called “opr-version-check.pl”. To execute this script on Linux, simply use:

```
./opr-version-check.pl <options>
```

Assuming it is in the current directory – specify the path to the file if it is not. To execute the script on Windows, either use:

```
perl opr-version-check.pl <options>
```

Or

```
oaperl.bat opr-version-check.pl <options>
```

Again, this assumes the script is in the current directory – specify the path if it is not. The first example above assumes that ActivePerl (or another engine) has been installed. The second example assumes that the OA Perl engine will be used. The batch file “oaperl.bat” locates the OA Perl engine and invokes the script, passing the options to it.

Example:

```
+++++
Operations Bridge Upgrade Check Utility
=====
Utility:      opr-version-check.pl (Version: 2.0)
Description:  This tool will provide you with valuable information for your upgrade planning to
               classic OBM 2020.05. This is the next release of Operations Bridge Manager, providing
               a full HTML-5 based interface for Operations Users that you might be interested in
               as part of your company's Adobe Flash-Player Removal initiative.

Common module: Version: 2.0
Additional:    HPBSM Version: 2.0
Running on:    OBWIN (MSWin32 Version: 10.0.14393)
Starting at:   Mon Jun 29 15:40:50 2020

+++++

[INFO] Running script in "online" mode

[INFO] **** Running script for OBM Infrastructure ...
[INFO] Running command to fetch OBM checker utility data. This could take several minutes ...
[INFO] Command executed in 2 minutes and 16 seconds
[INFO] OMi/OBM Server: OBWIN, O/S: Windows (Microsoft Windows Server 2016 Standard) with 20 GB memory
[INFO] Detected OMi/OBM Version: 11.00 build 010.011
[INFO] Core/Center Server: obwin.adh.local (url: https://obwin.adh.local:443)
[INFO] Server Roles: Gateway Server, Data Processing Server, Apache Server
[INFO] Management Database - MS SQL server VIMES\US (port 1434). Database Name: mgmt202005, user: sa
[OK] The MS SQL database version 14.0.1000.169 is supported for OBM version 2020.05
[INFO] Event Database - SQL Server server VIMES\US (port 1434). Database Name: event202005, user: sa
[INFO] RTSM Database - SQL Server server VIMES\US (port 1434). Database Name: rtsm202005, user: sa
[WARN] There are no valid Permanent/Time Based licenses for this system, only 8 Evaluation licenses
[INFO] 1 Core Server found (obwin)
[INFO] 1 Processing server found (obwin)
[INFO] 1 Centers Server found (obwin)
[OK] OBM/OMi version 11.00 (2020.05) is installed and has HTML-5 based Operations UI

[INFO] **** Finished running script for OBM Infrastructure ...
```

Using opr-version-check.pl

The Upgrade Version Check Tool supports two basic modes of execution – online or offline. By default, it will run in online mode which means that it expects at least the OBM admin account password. When running in offline mode, the script needs to be provided with the files to process which must be generated using the OBM utilities (described later).

When running in online mode, the Upgrade Version Check Tool must execute on either a Gateway or DPS server to access the OBM utilities that provide the information being processed.

The list of supported input parameters is as follows (and can be specified in any order):

Option	Explanation	Example
-offline	This is the default. If selected, then at least one input file is required	-offline
-online	If this switch is used, then the script must be executing on a Gateway or DPS server. Some checks require credentials with this switch specified	-online
-obm-input <file>	When using offline mode, this is the input file for the infrastructure checks (such as OBM version and patch level)	-obm-input /tmp/opr-server.txt
-mp-input <file>	When using offline mode, this is the input file that contains Management Pack information	-mp-input /tmp/mp-data.txt
-user <user>	When using online mode, this overrides the username assumed by default (admin) for logging on to OBM	-user operator
-pwd <pass>	The password for the OBM user	-pwd P@ssw0rd
-dbuser <user>	When using online mode, this overrides the login user for the backend database. This should not be required as the login user is determined during the OBM analysis	-dbuser sa
-dbpwd <pass>	The password for the OBM database user	-dbpwd P@ssw0rd

If the db-user parameter is not supplied, then the database user specified in the OBM configuration will be used. The db-user parameter is used to override that setting. If the -dbpwd parameter is NOT supplied, then the password specified via the -pwd parameter will be used for the account that connects to the database server.

In addition, the following switches can be used:

Option	Explanation	Example
-nocolor	The output uses colors. For example, “OK” messages are in GREEN whilst failure messages are in RED. This switch disables the use of colors if required	-nocolor

-log	This switch enables logging. All output sent to the screen is also captured in a log file. A log is created for each utility, will be in the current directory and the name is given as each utility completes	-log
-timeout <seconds>	The default timeout for commands issued by the scripts is 5 minutes. This can be overridden using the -timeout switch to either lengthen or shorten that time period. This only applies when the scripts run on Linux	-timeout 120
-help	Prints help text. If this is provided, then ONLY the help is shown – the script will immediately exit	-help

In addition to the above parameters, there are some “advanced” parameters that can be used to override the default behaviour. Under normal circumstances these should not be used.

The first is the parameter “-dbport” – this can be used to override the port that is used to connect to the database server. Normally this is obtained by the script when reading the configuration files, but in some cases, this may need to be changed dynamically.

The other two are switches that can be used with “offline” mode. The switch “-forcedb” will enable the database checks when the database server is found in the input file specified using the “-obm-input” parameter. If this switch is used, then the database password is also required. The switch “-forcetls” is similar – if an LDAP configuration is found then there will be a test for the LDAP server TLS version. This is normally disabled for the “offline” mode, but this switch will enable it.

Examples

All online checks

Running all online checks (this requires the script being executed on a Gateway or DPS Server). This results in the information shown in the screenshot at the beginning of this section.: -

```
./opr-version-check.pl -online -pwd P@ssw0rd1 -db-pwd P@ssw0rd2
```

OBM Version checks

Running offline to check the OBM version and upgrade recommendations:

```
./opr-version-check.pl -offline -obm-input /tmp/opr-server.txt
```

This results in information similar to:


```

u:\opr>perl opr-version-check.pl -offline -obm-input q:\Examples\checker\2018.11opr-checker.txt

*****
Operations Bridge Upgrade Check Utility
*****

Utility:      opr-version-check.pl (Version: 2.0)
Description:  This tool will provide you with valuable information for your upgrade planning to
               classic OBM 2020.05. This is the next release of Operations Bridge Manager, providing
               a full HTML-5 based interface for Operations Users that you might be interested in
               as part of your company's Adobe Flash-Player Removal initiative.

Common module: Version: 2.0
Additional:    HPBSM Version: 2.0
Running on:    OOH-DoranA10 (MSWin32 Version: 10.0.14393)
Starting at:   Mon Jun 29 12:33:50 2020

*****

[INFO] **** Running script for OBM Infrastructure ...
[INFO] OMi/OBM Server: ca568ob272.swinfra.net, O/S: Unix (3.10.0-957.10.1.el7.x86_64) with 16 GB memory
[INFO] Detected OMi/OBM Version: 10.71 build 016.001
[INFO] Core/Center Server: ca568ob272.swinfra.net (url: https://ca568ob272.swinfra.net:443)
[INFO] Server Roles: Gateway Server, Data Processing Server, Apache Server
[INFO] Management Database - Postgresql server localhost (port 5433). Database Name: mgmt, user: hpbsm
[INFO] Event Database - Postgresql server localhost (port 5433). Database Name: event, user: hpbsm
[INFO] RTSM Database - Postgresql server localhost (port 5433). Database Name: rtsm, user: hpbsm
[OK]   TIME_BASED License EVENT_MGMT_LICENSE. Capacity: 1. 949 days remaining. Valid: true
[OK]   TIME_BASED License TBEC_LICENSE. Capacity: 1. 949 days remaining. Valid: true
[OK]   TIME_BASED License MONITORING_AUTOMATION. Capacity: 1. 949 days remaining. Valid: true
[OK]   TIME_BASED License OPSBRIDGE_ULTIMATE. Capacity: 50. 949 days remaining. Valid: true
[OK]   There are 4 valid Permanent/Time Based licenses for this system
[WARN] OBM/Omi version 10.71 (2018.11) with no Patch can be directly upgraded to version 2020.05 for HTML-5 based Operations UI

[INFO] **** Finished running script for OBM Infrastructure ...

In case you need more information about the Micro Focus Operations Bridge Evolution program, please contact your Micro Focus
Support liaison, or send an email to OpsBEvolution@MicroFocus.com

```

In this example, the input file has been analysed and it has been determined that the server which provided the file is running an older version of OBM which can be directly upgraded to the current release.

Management Pack Checks

The online check will show the installed Management Packs and indicate whether they should be upgraded. The offline check will only include this if the `-mp-input` argument is used, specifying a file generated using the built-in tools (described later). To include this input file for the offline checks:

```
./opr-version-check.pl -offline -obm-input /tmp/opr-checker.txt -mp-input /tmp/mp.txt
```

This generate output like:

```

[INFO] **** Running script for Management Packs ...
[OK]   Management Pack: AWS Version: 2019.05 is the current version
[OK]   Management Pack: TIBCO Version: 1.00 is the current version
[OK]   Management Pack: SAP Log Streaming Version: 2018.06 is the current version
[OK]   Management Pack: Component for Database Management Packs Version: 1.10 is the current version
[OK]   Management Pack: Microsoft SharePoint Server Version: 1.01 is the current version
[OK]   Management Pack: JBoss Application Server Version: 2019.08 is the current version
[OK]   Management Pack: WebSphere Metric Store (AddOn) Version: 1.00 is the current version
[OK]   Management Pack: Apache Kafka (AddOn) Version: 1.10 is the current version
[OK]   Management Pack: Microsoft SQL Server Version: 2.00 is the current version
[OK]   Management Pack: Microsoft Azure LogStreaming (AddOn) Version: 2.30 is the current version
[OK]   Management Pack: Infrastructure Version: 2.0 is the current version
[OK]   Management Pack: Vertica Version: 1.00 is the current version
[OK]   Management Pack: Oracle Database Version: 1.12 is the current version
[OK]   Management Pack: Infrastructure AddOn Version: 2018.11 is the current version
[OK]   Management Pack: SAP Sybase ASE Version: 1.00 is the current version
[OK]   Management Pack: GoogleCloud Version: 1.00 is the current version

```

System Checks

The utility will read information from the Management Database (normally mgmt) to determine whether the DPS and Gateway servers meet the current recommendations for small/medium/large environments. Warnings will be given if this is not the case.

This check is only performed using the “online” mode.

Indicator Mapping Rules

If Custom Indicator Mapping Rules are defined, it is still necessary to use a Flash based UI in order to make changes (this will be rectified in a future update of OBM). The utility will check whether any such rules have been defined and generate an informational “NOTE” message if any are found:

```
[INFO] Checking for Indicator Mapping Rules custom definitions...
[NOTE] There are 3 Indicator Mapping Rules that still require Flash for editing. To list these rules, check the documentation
```

It is possible to list these Rules by name if that information is useful. To do that, the “Event” database information will be required. This is listed just before the message relating to making the checks:

```
[INFO] Event Database - Postgresql server localhost (port 5433). Database Name: event, user: hpbsm
[INFO] Checking for Indicator Mapping Rules custom definitions...
[NOTE] There are 3 Indicator Mapping Rules that still require Flash for editing. To list these rules, check the documentation
```

In this example, the event database is on the Postgres server on the localhost, available on port 5433 and accessed using the hpbsm user. In the case of an Oracle server, the SID will also be displayed.

In order to show the Indicator mapping rules by name, the “database-checks.pl” script can be called directly using the above information:-

```
./database-checks.pl -server localhost -dbevent event -user hpbsm -pwd P@ssw0rd -
dbtype postgres -port 5433 -etidetail
```

The results would then be like:

```
+++++
Operations Bridge Upgrade Check Utility
=====

Utility:      database-checks.pl (Version: 1.1)
Description:  Database checking script

Common module: Version: 2.6
Additional:   DB Version: 2.6
Running on:   obux.admgt.co.uk (linux Version: 3.10.0-693.17.1.el7.x86_64)
Starting at:  Mon Oct 26 12:21:54 2020

+++++

[INFO] Checking event database "event" ...
[NOTE] There are some custom Indicator Mapping Rules that still require Flash for editing:

        Sales_Application (Indicator Mapping for Sales related Applications)
        Lab_Testing (Indicator Mapping Lab tests)
```

It is important to specify the database type using the -dbtyoe switch. The valid types are

Postgres

Oracle

MSSQL

If the type is not specified, then you will be prompted to provide it. If the database type is Oracle, the SID must be provided using the -SID parameter (the SID will be shown with the other details when the opr-version-check.pl script runs).

This check is only made when the online checks are made.

UCMDB Content Packs Check

An additional check is now included for the UCMDB database (normally named “rtsm”). When new Content Packs are installed, the old ones are not unregistered. This can consume quite a lot of space in the database – and on disk. The check will highlight if more than one UCMDB content pack is found.

Micro Focus has a blog entry that describes the steps that can be taken to groom this information:

<https://community.microfocus.com/t5/CMS-Discovery-CMDB-User/Maintenance-tip-cleanup-of-the-old-Content-Packs/m-p/2776901#M20958>

Preparing Offline files

When running in offline mode, the input files must have been generated previously. The “loggrabber” utility can be used to generate some of these files, but if a login is required – loggrabber cannot process the information. This section gives some examples in generating these files.

The examples are based on Linux but can be executed on Windows. The default location for the utilities on Windows is “C:\HPBSM\opr\support” and “C:\HPBSM\opr\bin”, although this can be changed if OBM is installed at a different location.

On Windows, the file extensions for all utilities is “.bat”

Using “opr-checker”

The file used when the argument “-obm-input” is specified can be generated using the “opr-checker” tool with the switches “-sys -opr -rapid” or “-all -rapid”. For example:

```
/opt/HP/BSM/opr/support/opr-checker.pl -sys -opr -security -rapid > /tmp/opr-checker.txt
```

This file can then be copied to a location where the Upgrade Version Check Tool will be executed. Note that the switch “-all” can be used instead of “-sys -opr -security”.

In some cases, not all information is provided using the opr-checker tool. When this happens, the additional information can be obtained using the “opr-support-utils” tool and by including the file “TopazInfra.ini” (located in the “c:\HPBSM\conf” on Windows, “/opt/HP/BSM/conf” on Linux). These additional files should be concatenated (merged) with the output from the opr-checker tool (see later for examples).

Use if the opr-support-utils tool is described in the next section.

To determine whether the file generated by opr-checker has all the information required, use the following:

```
cat /tmp/opr-checker.txt | grep -I TopazInfra
cat /tmp/opr-checker.txt | grep -I opr.db.connection.dbname
cat /tmp/opr-checker.txt | grep -I odb.db.connection.dbname
```

or on Windows

```
c:\> type c:\temp\opr-checker.txt | findstr -I TopazInfra
c:\> type c:\temp\opr-checker.txt | findstr -I opr.db.connection.dbname
c:\> type c:\temp\opr-checker.txt | findstr -I odb.db.connection.dbname
```

using the file generated using the utility. If the check for “TopazInfra” returns no results, then the TopazInfra.ini file is required. If the checks for the “dbname” entries return no results, then the output from opr-support-utils is required (note that the check for odb.dn.connection.dbname is looking for information relating to the UCMDB – so if that has not been configured then it is expected to return no results).

Using “opr-support-utils”

This tool can be used to retrieve information relating to the event and UCMDB databases if this information was not picked up by the opr-checker utility. If you do not require this information (or do not have the UCMDB database configured), then these steps can be skipped.

To generate a file that contains information for the event database:

```
/opt/HP/BSM/opr/support/opr-support-utils.sh -list_settings -context opr > /tmp/opr.txt
```

To generate a file that contains information for the UCMDB (rtsm) database:

```
/opt/HP/BSM/opr/support/opr-support-utils.sh -list_settings -context odb > /tmp/odb.txt
```

These files can be combined with the output of the opr-checker utility and TopazInfra.ini (if required) to generate a single input file for the version check util. See below for examples on doing this.

Obtaining Management Pack Information

The Management Pack information is obtained by using the utility “ContentManager”. This will require user credentials:

```
/opt/HP/BSM/bin/ContentManager.sh -user admin -pw P@ssw0rd -l -verbose >  
/tmp/mp.txt
```

This file can then be provided as a separate input file using the -mp-input parameter for the upgrade checker tool to run in offline mode.

Combining multiple files into one

Running the upgrade checker too in offline mode expects a single file generated by the “opr-checker” utility to be an input file. In some circumstance as described earlier, the “opr-checker” tool will not obtain all information and so a second utility is used to provide that information (along with the TopazInfra.ini file”. These files need to be combined into a single file to use them with the upgrade check tool.

On Linux, this can be done as follows:

```
cat /tmp/opr-checker.txt /tmp/opr.txt /tmp/odb.txt /opt/HP/BSM/conf/TopazInfra.ini  
> /tmp/all-data.txt
```

This will result in a single file “all-data.txt” that can be used as the input file. On Windows, the equivalent would be:

```
C:> copy c:\temp\opr-checker.txt + c:\temp\opr.txt c:\temp\odb.txt +  
c:\HPBSM\conf\TopazInfra.ini > c:\temp\all-data.txt
```

APM Check Utility

A separate utility is provided for use with APM. It uses the same support libraries that the other scripts use but is not driven using the “opr-version-check” script. Instead, the run-apm-checks.pl script must be used directly.

As with the other script utilities, run-apm-checks.pl can be executed from either a Windows system or a Linux system. There are some restrictions on the use of the script, depending on where it is executed from.

The main restriction is that the checks for information held in the APM management database can currently only run from a Windows platform. If the APM Gateway server is a Linux server, this means that the script may need to run on the Gateway server and then run again from a Windows system to connect to the database server and get all of the information.

Off-line mode is not supported by this script.

The list of supported input arguments and switches is in the table below, and can be passed in any order:

Option	Explanation	Example
-host <host>	The APM Gateway host (where the jmx server is running)	-host myserver
-user <user>	The APM username. If not provided, “admin” is assumed	-user operator
-pwd <password>	Password for the APM user	-pwd P@ssw0rd
-netrc	Use the .netrc file for credentials (see below)	-netrc
-nojmx	Do not perform any jmx checks	-nojmx
-dbhost <host>	The SQL or Oracle server hosting the APM management database (if using SQL then any instance should be specified – host\instance)	-host server1
-db <database>	The APM Management database name	-db mgmt.
-dbuser <user>	The login ID with access to the APM database	-dbuser sa
-dbpwd <password>	The password for the login ID	-dbpwd P@ssw0rd
-dbport <port>	The port used to connect to the database server (if not specified, this defaults to 1433 for a SQL Server or 1521 for an Oracle Server)	-dbport 1432
-trusted	If using SQL Server, specifying this switch means that the current Windows account will be used to connect	-trusted
-dbsid <SID>	For an Oracle connection, the SID to use	-sid orcl
-dbtype <type>	APM databases are supported on MS SQL or Oracle. The options here are “MS SQL” or Oracle (“MS SQL” must be specified in quotes). The default is “MS SQL”	-dbtype “MS SQL”

In addition, the following switches can be used:

Option	Explanation	Example
-nocolor	The output uses colors. For example “OK” messages are in GREEN whilst failure messages are in RED . This switch disables the use of colors if required	-nocolor
-verbose	Include additional informational messages	-verbose
-log	This switch enables logging. All output sent to the screen is also captured in a log file. A log is created for each utility, will be located in the current directory and the name is given as each utility completes	-log
-help	Prints help text. If this is provided then ONLY the help is shown – the script will immediately exit	-help

Examples

Below are some examples of running the script. On Windows, perl is required and either needs to be installed separately (for example ActivePerl) or if the Operations Agent has been installed – the oaperl.bat file can be used to execute the script. An OA agent is NOT installed by default on an APM server, so this would have to be done as a separate exercise.

Running on a Gateway Server on Windows

```
C:\> perl c:\scripts\run-apm-checks.pl -pwd P@ssw0rd -dbpwd P@ssw0rd2
```

Because the script is running on the APM Gateway server, only the passwords will be required to access the JMX pages and backend database. The information about the connections to the JMX pages, and the database server will be picked up from the APM configuration

Running on a Gateway Server on Windows

```
./run-apm-checks.pl -pwd P@ssw0rd
```

Because the script is running on the APM Gateway server, only the APM password is required. The database server cannot be checked from Linux, but the information on the server (type of Database, host name etc.) will be displayed.

Running on Windows system (not a Gateway server)

```
C:\> perl c:\scripts\run-apm-checks.pl -host myhost -pwd P@ssw0rd -dbhost mydbserver -dbuser admin -dbpwd P@ssw0rd2 -sid orcl -dbtype Oracle
```

In this case, all information relating to the Gateway host (where the JMX pages are) and the database server are required. With this information, connections will then be made to those servers to retrieve the configuration data.

By default, access to the JMX pages is restricted to the localhost only. In order to access them remotely – configuration changes (changes to infrastructure) are required. See the APM documentation for information on how to do this, and the implications of doing so.

Using the `_netrc` File

Using a `_netrc` file is a way to avoid passing credentials via the command line when accessing a url. This can be used with the script (but only for the JMX processing). For more information on configuring this file, see the information at:

<https://community.apigee.com/articles/39911/do-you-use-curl-stop-using-u-please-use-curl-n-and.html>

Note that on Windows, the file is expected to be in the `%USERPROFILE%` directory.

OBR Check Utility

A separate utility is provided for use with OBR. It uses the same support libraries that the other scripts use but is not driven using the “opr-version-check” script. Instead, the run-obr-checks.pl script must be used directly.

As with the other script utilities, run-obr-checks.pl can be executed from either a Windows system or a Linux system. The script supports both “online” and “offline” mode – running “online” means that the script must be executed on an OBR server. To run in “offline” mode, the OBR capture tool must be executed manually.

The OBR capture tool is documented here:

https://docs.microfocus.com/itom/Operations_Bridge_Reporter:10.40/Troubleshoot/Troubleshooting_SHR/Capture

This must be installed and configured before the script can be used and must be executed manually to use the script in “offline” mode. When running manually, a zip file will be created (the location will be given as the capture tool runs). This zip file can then be used as the input to the script.

Supported parameters and switches:

Option	Explanation	Example
-zipfile <filename>	This argument is used to specify the filename of the zip file generated by manually running the OBR Capture tool. If this is not provided then the script will run the tool (meaning the script must run on the OBR server)	-zipfile /tmp/obr.zip

Sample output (online mode):

```

+++++
Micro Focus Operations Bridge Upgrade Version Check Tool
=====
Utility:      run-obr-checks.pl (Version 1.30)
Description:  This tool will provide you with valuable information for your upgrade planning to classic OBM 2020.05. This is the
               next release of Operations Bridge Manager, providing a full HTML-5 based Operational User interface that you might be
               interested in as part of your company's Adobe Flash-Player Removal initiative
Common module: Version 1.30
Other modules: Compress module Version: 1.30
Running on:    catblirm46-obrl-dhananjaya.hpeswlab.net (linux, Version: 2.6.18-402.el5)
Starting at:    Thu May 14 19:55:53 2020

+++++

[INFO ] Running command to capture OBR Capture tool, this will take up to 5 minutes...
[INFO ] Command executed in 3 minutes and 46 seconds
[INFO ] Extracting zipped files ...
[INFO ] Analysis for linux server catblirm46-obrl-dhananjaya.hpeswlab.net with Vertica Server: catblirm46-obrl-dhananjaya.hpeswlab.net

[INFO ] OBR Version information ...
[WARN ] Package OBR1022LIN_00001, Version: 10.22.000 with Patch: 00001. Release State: PATCH - this needs to be upgraded to Version: 10.40

[INFO ] System Information ...
[INFO ] Red Hat Enterprise Linux Server release 6.7 (Santiago), 8 CPUs and 16 GB memory
[INFO ] Local Disk Information:
       Disk: /dev/sda, size: 214.7 GB
       Disk: /dev/mapper/vg_catblirm46obrl-dhananjaya-lv_root, size: 205.8 GB
       Disk: /dev/mapper/vg_catblirm46obrl-dhananjaya-lv_swap, size: 8438 MB

[INFO ] CMDB Information ...
[INFO ] CMDB Server: catblirm23.hpeswlab.net, port: 21212. Accessed via user: admin

[INFO ] Content packs ...
[WARN ] ETL_OM10x, Version: 10.00.001 - recommended version: 10.01.001
[WARN ] Core, Version: 10.00.001 - recommended version: 10.01.003
[INFO ] CoreServiceHealth, Version: 10.00.002
[WARN ] OMi, Version: 10.00.002 - recommended version: 10.00.006
[WARN ] SystemManagement, Version: 10.00.001 - recommended version: 10.21.006
[WARN ] CoreSystemManagement, Version: 10.00.004 - recommended version: 10.21.006
[WARN ] ETL_SystemManagement_PA, Version: 10.00.002 - recommended version: 10.21.003
[INFO ] ETL_APMOMi_SLM, Version: 10.20.003
[INFO ] SLMAApp, Version: 10.00.000
[INFO ] SLMDomain, Version: 10.00.000
[INFO ] Virtualization, Version: 10.00.001
[INFO ] CoreVirtualization, Version: 10.00.001

[INFO ] In the information above, if a Content Pack is shown as "INFO" then there has been no version check made. Check online for more details:

       https://docs.microfocus.com/itom/Operations_Bridge:Content/Home

[INFO ] The definition file used for checking Content Pack versions is: obr-cp-versions.dat
[INFO ] Removing temporary files ...

```