# DB2SPI

# SMART Plug-In for managing IBM's DB2 Universal Database with HP OpenView Operations

Version A.03.00 December 2005

## **Release Notes**



### What is new with A.03.00?

Version A.03.00 of the DB2SPI has been expanded to support new OVO/Unix 8.20 release, some new platforms (mainly Itanium and HTTPS agents) besides some functional improvements. Key differences are:

- Support of OVO/Unix 8.20 on various hardware platforms
- Support of new HTTPS agents.
- Integration with HP's Self-Healing agent.
- Support of OVO/Unix "Selective Distribution"
- Support of "non-root" OVO agents
- DB2 Replication monitoring.
- Great improvements in processing performance metrics
- Tools for license checking and reporting
- A number of defects have been fixed.

This functionality will soon also be available for OVO/Windows.

### **OVO Platform Requirements**

DB2SPI A.03.00 requires either HTTPS agents or the latest DCE agents (Version 7.25 at least) to operate.

If you are operating older versions of OVO agents or even VPO 6.x, you cannot upgrade to this version.

### **Platform Support**

#### **OVO Management Server**

We are supporting OVO/Unix versions 7.10, 8.0, 8.10 and 8.20 with this release, on all hardware platforms supported by HP.

#### **OVO Managed Nodes**

New agent platforms are Solaris 10 and AIX 5.3, using HTTPS agents

### **DB2 Support**

The latest version currently available from IBM, i.e, DB2 version 8.2.3, and the former DB2 8.x versions are fully supported. DB2 version 7.x is still operable, but cannot benefit from some of the product enhancements (see below).

### **Integration Extensions**

HP has extended the infrastructure for the OVO components over the last months, and the DB2SPI has been adapted to these changes.

#### **Self-Healing Services**

The DB2SPI comes with a tool for the collection of data in case of issues and problems. This may help support significantly to analyze the cause of a problem and provide efficient assistance.

#### **Non-root Agent**

In many secured environments the OVO agents must not be operated with "root" or "Administrator" permission, but often management can only be achieved by appropriate access rights.

The DB2SPI has been adapted to operate in such restricted environments with little hassle.

#### **OV Reporter**

The reports have been revised, minor corrections have been made and the latest OV Reporter version is now supported.

### **Usage Improvements**

#### **Reduced the Number of Tools**

With DB2SPI A.03.00 we apply smarter methods internally to detect and deal with different platforms. We also take advantage from the fact, that all newer OVO agents now support the "\$AGENT\_USER" as the owner of jobs.

This helped us a lot to get rid of the duplication of tools and tool groups, for Unix and Windows managed nodes. Now there are just two application groups, one for DB2 operating and one for DB2SPI administration.

#### New tools for License Checks

Two new tools are available now for license verification:

- "License List" shows the DB2SPI runtime licenses that are installed on the management server
- "License Check" verifies that a managed has a valid runtime license.

### **Functionality Extensions**

#### **DB2 Replication Monitoring**

DB2 Replication can be monitored with the DB2SPI A.03.00.

This includes a tool for checking the replication status and a monitor for the replication log files.

#### Metrics Processing: Improved Throughput

The collection of standard metrics is now implemented in a binary program using embedded SQL (ESQL) and direct DB2 function calls rather than Perl-based interpretation of DB2 snapshot files. This accelerates processing at least by a factor of ten (depends, however, on the structure and size of the instances and databases).

Note, that for user-defined metrics (UDM) we still require the former approach in order to provide the flexibility of Perl in defining metric calculation rules.

The new embedded (ESQL) approach is available only for DB2 8.x versions. Older versions do not provide similar access and hence must be processed in the classical way. We therefore still support this classical processing for standard metrics, and the method can be switched in the db2s\_spi.cfg configuration file.

Please note that the DB2SPI uses the default of ESQL upon installation and configuration and does not adapt this to PERL in case of version 7.x automatically. This must be done by the user <u>after</u> "Config Setup", but <u>before</u> policy deployment.

### Limitations

We still have only restricted support of ESE / EEE editions of DB2.

### **Platforms and Internals**

#### **Supported Platforms**

The platform matrix for the management servers and managed nodes (DB2 servers) has been updated / extended and is provided as a separate document.

#### Languages Used by the DB2SPI

#### Perl and more

All primary processing scripts are written in <u>Perl</u>. This makes it necessary to have Perl available on the managed nodes as a prerequisite. The only supported version is Perl 5.6.1, as provided with the OVO 7.x agent and later.

Please note that the OVO agent Perl for AIX is not functional.

A working copy (original IBM Perl 5.6.1) can be downloaded from the NiCE Customer Portal at <u>https://portal.nice.de/Portal/login.jsp</u>

Note, that other versions of Perl will not work!

#### **Other requirements**

On the management stations CGI (OVO/Unix) and ASP (OVO/Windows) scripts are used to execute the UDM editor, which is web-based.

### **Manual Changes**

The DB2SPI User's Guide has been extended to cover the new or improved areas.

In the appendix we provide the list of processes monitored, and the report templates that are available for OV Reporter.

Other information like the definition of the metrics and of the filtered log file entries can be found in the DB2SPI Reference Guide.

### Upgrade A.02.08 to A.03.00 (OVO/Unix)

### What is replaced?

The software bundle must be renewed on the management server and on the managed nodes.

We have replaced all configuration data (templates, applications, instrumentation scripts and default configuration files). If you should have made changes to existing configuration data, they must be viewed carefully before the upgrade is made:

- All Application calls have been changed to make use of \$AGENT\_USER and the new generic db2s\_start script.
- Most templates are left unchanged, but the acting user (where applicable) has generally been set to \$AGENT\_USER.

### What can be preserved?

All configurations that have been made on the managed node ("Config Setup") can be preserved with this upgrade.

Even your metric data that have been stored on Unix managed nodes are preserved and data storage can be continued.

If you have made changes to templates, you should back them up before doing the upgrade. Details are described below.

Note, that your copies of schedule templates for Windows managed nodes need also to be changed to use the \$AGENT\_USER rather than the "HP ITO Account".

### **Upgrade Steps**

#### **Prepare Prerequisites**

There are no special, preparatory steps required.

#### Save your old Configuration Data

In the OVO Administrator GUI do the following:

 Make a configuration backup using "Node Bank > Server > Download Configuration" and save the "Templates" that you had modified

#### **Remove older Versions of DB2SPI and ATOP**

Use swremove from the command line or GUI to

Remove DB2SPI and DB2SPI-Doc

#### Install DB2SPI A.03.00

Install the new package as described in the DB2SPI A.03.00 User's Guide

Reapply changes made to templates via the OVO admin GUI or upload those saved formerly with opccfgupld(1m).

#### **Deploy new Instrumentation and Templates**

From the OVO admin GUI, simply distribute "commands", "monitors" and "templates" to the managed DB2 nodes.

### **Known Bugs and Problems**

### **Reduced Functionality compared to earlier Releases**

• FCM Metrics (0890, 0900, 0910, 0920) are not available any longer (ID: 1389)

Symptom:

The metric data collection cannot provide reasonable values for these metrics

Reason:

These metrics can currently not be collected with SQL means from the DB2 internal performance tables.

Workaround:

None, except switching back to Perl operation.

ESQL metric collection cannot be applied on Windows managed nodes (ID: 1443)

Symptom:

Metric data collection aborts

Reason:

There is a problem connecting to the database with embedded SQL call and a support call is pending.

Workaround:

Disable ESQL metric collection on these nodes by specifying PERL in the local db2s\_spi.cfg configuration file.

### **Other issues**

The following problems are known to us at the time of delivery of the DB2SPI A.03.00.

#### • \$AGENT\_USER unknown on Windows DCE nodes (ID: none)

Symptom:

Running any application or schedule template fails on Windows managed nodes with older DCE agent.

Reason:

There is a problem in the OVO DCE agent dealing with the new \$AGENT\_USER.

Workaround:

You may upgrade your managed node to use the OVO HTTPS agent supplied with OVO/Unix 8.0.

A DCE agent patch will be available from HP in a few weeks, please check the HP support pages.

# db2s\_make\_svctree.pl fails if all databases of an instance are excluded (ID: 521)

Symptom:

The service tree does not get updated in all databases of a monitored instance are excluded from monitoring.

Reason:

The script executing on the management server does not receive information that there is "no database".

Workaround:

None.

#### Instruction Texts missing (ID: 526)

Symptom:

For some events shown in the message browser there are no instruction texts available

Reason:

Due to limited resources in the developer team we have not been able to close all gaps until release.

Workaround:

None. We are working on an update.

#### Instruction text window opened only after long delay (ID: 661)

Symptom:

Requesting "Instructions ..." from the OVO/Unix message browser takes quite long sometimes.

Reason:

With a highly loaded OVO management server the processing of the instructions repository (an XML file on the management server) takes pretty long.

Workaround:

Be patient. We are looking for performance improvements with the next release by splitting up this information in various files.

#### • Diagnostic log files are not monitored (ID: 878)

Symptom:

The db2s\_diag.pl creates error messages in db2spi.log about missing diagnostic log file information.

Reason:

In some environments, the DATABASE MANAGER CONFIGURATION does not provide information about the path for the diagnostic (or administrative) log files and no error is shown during "Config Setup".

#### Workaround:

Enter these names manually into the .../conf/db2s\_diagfiles.cfg and .../conf/db2s\_admfiles.cfg. For each instance managed, the full path and name of the respective files must be given. An entry could look like this:

db2inst1|/home/db2inst1/sqllib/db2dump/db2inst1.nfy