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#####
# IBM Content Manager OnDemand for z/OS V9.0.0      #
# README                                             #
# Sept. 07, 2012                                    #
#                                                    #
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The OnDemand for z/OS home page can be reached at:
<http://www.ibm.com/software/data/ondemand/390>
From there you can navigate to the product support page by clicking the Support link on the left hand side of the page. The support page provides many links to helpful product information and the ability to search the support site.
This README file can be found at the following technote link. It will contain the most recent updates to this file.

<http://www.ibm.com/support/docview.wss?uid=swg27036116>

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===== OnDemand Server, Database and DB2 Topics (REQUIREMENTS AND UPGRADING) -----

- OnDemand for z/OS V9.0.0 Prerequisites
 - z/OS 1.13
 - DB2 Version 9
 - TSM - 5.5
 - ODWEK Java APIs'/Servlet?Linedata applet - Java 1.6
 - IBM XML Toolkit for z/OS v1.10 with 64-bit support

All the listed versions are the minimum version - all later versions to the minimum are considered to be supported.

<Upgrading from V8.4.0 to V9.0.0>

Customers upgrading to OnDemand for z/OS V9.0.0 from OnDemand for z/OS V8.4.0 will need to perform the following actions for each server being upgraded to OnDemand V9.0.0.

Customers should review the v8.5.0 Readme regarding the CODEPAGE information and the ARSMIG85 job. ODF customers should review the ODF section of the v8.5.0 Readme as well.

The V8.5.0 README file can be found at the following technote link. It will contain the most recent updates to this file.

<http://www.ibm.com/support/docview.wss?uid=swg27020591>

PRE-DATABASE UPGRADE STEP

Perform the following to verify the database may be upgraded to be used by OnDemand v9.0.0. Prior to performing the database upgrade steps below, execute the following SQL to determine if any of the ARSAPP columns are currently too big to fit in the updated tables:

```
SELECT NAME, AGID
FROM ARSUSER.ARSAPP
WHERE LENGTH(FIXED_VIEW) > 10000 OR
LENGTH(INDEXER) > 10000 OR
LENGTH(PREPROCESSOR) > 10000;
```

and

```
SELECT AGID, ID, DOC_NAME, DOC_OFF, DOC_LEN, COMP_OFF, COMP_LEN
FROM ARSUSER.ARSANN
WHERE LENGTH(TEXT_BUF) > 32424;
```

If any rows are returned, DO NOT CONTINUE. Contact IBM Support for assistance. The columns will need to be reduced in size before the databases are accessible by OnDemand V9.0.0.

DATABASE UPGRADE STEP

Upgrading customers will need to perform the following steps before accessing the existing OnDemand V8.4.0 database using OnDemand V9.0.0. Customers will need to have a database backup and recovery plan implemented prior to performing this procedure.

1. Stop all OnDemand activity on databases being upgraded to V9.0.0.
2. Customize and execute the ARSTSPCD member of SARSINST to create the additional tablespaces added in v8.4.1.
3. Customize and execute the ARSTSPCE member of SARSINST to create the additional tablespaces added in v9.0.0.
4. Backup the OnDemand Database or make sure a current backup is available.
5. Run the following commands from the /usr/lpp/ars/V9R0M0/bin directory for each OnDemand server instance being upgraded to OnDemand V9.0.0.

- 1) Run "arsdb -l <instance_name> -vx ARSAGPERMS ARSANN ARSAPP ARSAPPUSR ARSNAMEQ ARSPRTOPTS ARSSYS" to export the tables.
 - 2) Run "arsdb -l <instance_name> -vd ARSAGPERMS ARSANN ARSAPP ARSAPPUSR ARSNAMEQ ARSPRTOPTS ARSSYS" to drop the tables.
 - 3) Run the sample job to drop the tablespaces (ARSDTSPC - optional)
 - 4) Run the sample job to re-create the tablespaces (ARSCTSPC – optional)
 - 5) Run "arsdb -l <instance_name> -vrt ARSAGPERMS ARSANN ARSAPP ARSAPPUSR ARSNAMEQ ARSPRTOPTS ARSSYS" to create the tables.
 - 6) Run "arsdb -l <instance_name> -vi ARSAGPERMS ARSANN ARSAPP ARSAPPUSR ARSNAMEQ ARSPRTOPTS ARSSYS" to import the tables.
 - 7) Run "arsdb -l <instance_name> -vrt ARSHOLD ARSHOLDMAP ARSHOLDPERMS ARSHOLDWORK ARSCFSODWORK ARSFTIWORK ARSCFSODWORK ARSCMFEDWORK" to create new tables since v8.4.0.
 - 8) Run "arsdb -l <instance_name> -vu" to perform additional table updates.
 - 9) Run "arsdb -l <instance_name> -efv" drop the indexes.
 - 10) Run "arsdb -l <instance_name> -rv" recreate the indexes.
 - 11) Run "arsdb -l <instance_name> -mv" run maintenance and update statistics.
- <end Upgrading from V8.4.0 to V9.0.0>
-

<Upgrading from V8.4.1 to V9.0.0>

Customers upgrading to OnDemand for z/OS V9.0.0 from OnDemand for z/OS V8.4.1 will need to perform the following actions for each server being upgraded to OnDemand V9.0.0.

Customers should review the v8.5.0 Readme regarding the CODEPAGE information and the ARSMIG85 job. ODF customers should review the ODF section of the v8.5.0 Readme as well.

The V8.5.0 README file can be found at the following technote link. It will contain the most recent updates to this file.

<http://www.ibm.com/support/docview.wss?uid=swg27020591>

DATABASE UPGRADE STEP

Upgrading customers will need to perform the following steps before accessing the existing OnDemand V8.4.1 database using OnDemand V9.0.0. Customers will need to have a database backup and recovery plan implemented prior to performing this procedure.

1. Stop all OnDemand activity on databases being upgraded to V9.0.0.
2. Customize and execute the ARSTSPCE member of SARSINST to create the additional tablespaces added in v9.0.0.
3. Backup the OnDemand Database or make sure a current backup is available.
4. Run the following commands from the /usr/lpp/ars/V9R0M0/bin directory for each OnDemand server instance being upgraded to OnDemand V9.0.0.

- 1) Run "arsdb -l <instance_name> -vx ARSAGPERMS ARSANN ARSAPP ARSAPPUSR ARSNAMEQ ARSPRTOPTS ARSSYS" to export the tables.
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 - 7) Run "arsdb -l <instance_name> -vrt ARSFTIWORK ARSCFSODWORK ARSCMFEDWORK" to create new tables since v8.4.1.
 - 8) Run "arsdb -l <instance_name> -vu" to perform additional table updates.
 - 9) Run "arsdb -l <instance_name> -efv" drop the indexes.
 - 10) Run "arsdb -l <instance_name> -rv" recreate the indexes.
 - 11) Run "arsdb -l <instance_name> -mv" run maintenance and update statistics.
- <end Upgrading from V8.4.1 to V9.0.0>
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<Upgrading from V8.5.0 to V9.0.0>

Customers upgrading to OnDemand for z/OS V9.0.0 from OnDemand for z/OS V8.5.0 will need to perform the following actions for each server being upgraded to OnDemand V9.0.0.

DATABASE UPGRADE STEP

Upgrading customers will need to perform the following steps before accessing the existing OnDemand V8.5.0 database using OnDemand V9.0.0. Customers will need to have a database backup and recovery plan implemented prior to performing this procedure.

1. Stop all OnDemand activity on databases being upgraded to V9.0.0.
2. Customize and execute the ARSTSPCE member of SARSINST to create the additional tablespaces added in v9.0.0.
3. Backup the OnDemand Database or make sure a current backup is available.
4. Run the following commands from the /usr/lpp/ars/V9R0M0/bin directory for each OnDemand server instance being upgraded to OnDemand V9.0.0.

- 1) Run "arsdb -l <instance_name> -vx ARSAGPERMS ARSANN ARSAPP ARSAPPUSR ARSNAMEQ ARSPRTOPTS ARSSYS" to export the tables.
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 - 7) Run “arsdb -l <instance_name> -vrt ARSFTIWORK ARSCFSODWORK ARSCMFEDWORK” to create new tables since v8.5.0.
 - 8) Run “arsdb -l <instance_name> -vu” to perform additional table updates.
 - 9) Run “arsdb -l <instance_name> -efv” drop the indexes.
 - 10) Run “arsdb -l <instance_name> -rv” recreate the indexes.
 - 11) Run “arsdb -l <instance_name> -mv” run maintenance and update statistics.
- <end Upgrading from V8.5.0 to V9.0.0>
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*** Upgrade all OnDemand object servers**

When upgrading the Content Manager OnDemand Server to the current version, you will need to upgrade any Object Servers and any servers used for remotely loading data to the same version as well. You will also need to upgrade the Windows Administrator Client to at least the same level as the Server.

*** Backup your database and configuration files**

Before Installing OnDemand 9.0.0, you should backup your database and make sure you have a copy of the currently installed version of OnDemand. You should backup your configuration files also.

*** Recompile exits**

It is always recommended to recompile the Content Manager OnDemand Server User exits on a new release. If using the ARSUSEC exit, a recompile is required.

*** Changed exits**

If using the OS/390 indexer exits, the call to arsz390i_fopen has changed from 3 parameters to 4 parameters. Include SARSLOAD(ARSZ390F) instead of SARSLOAD(ARSZ390I) on the link-edit of the exit if you wish to continue using the 3-parameter call.

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OnDemand Server, Database and DB2 Topics (NEW FEATURES)

New command: ARSSOCKD

The command ARSSOCKD has been added, which starts, stops, and displays Content Manager OnDemand process and configuration server information.

New F ARSSOCKD,D,<STATUS | CONFIG | ENVAR | ICSF>

provides console display of STATUS (similar to ARSSOCKD -p), configuration options in effect, the current environment variables in effect as well as the current status of ICSF

New command: ARSAFPD

The command ARSAFPD has been added, which provide information about the format of an input file and displays AFP documents in a readable format.

Password phrase support

If password is >8, PHRASE= is used instead of PASSWORD= on RACROUTE

Specify a different character to be the delimiter in parameter files

You can now specify a pair of characters other than the left and right bracket as the delimiter characters in parameter files for the ARSDOC command.

FileNet Systems Monitor (FSM)

FileNet Systems Monitor (FSM) is a purchased product which can monitor other programs

OnDemand is integrated with FSM in two ways – FSM can monitor the OnDemand system log and report when errors occur. This is done through an ODWEK module provided to and shipped by FSM. FSM can also monitor the status of the arsockd program via the new commandline options to provide thread listings and “ping” status.

The second way is through the FSM listener which is directly implemented in the arsockd program and can be attached to via a network port to relay information to a listening program, in this case, FSM. The port is defined in the ars.cfg file (or registry section on Windows) for the appropriate server. The environment variable is ARS_LISTENER_PORT. If not defined then the listener is inactive. If defined as 0, the default port of 32775 is used.

Full text indexing

OnDemand now provides support for full text indexing.

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OnDemand Server, Database and DB2 Topics (ENHANCEMENTS)

Security enhancements

The following security enhancements were added:

You can now specify user IDs and passwords through encrypted files (stash files), instead of specifying them through the command line or a file.

OnDemand now tracks the following login activity:

The number of times a user attempts to login.

The last time a user logged in.

The last time a user changed his password and number of times he changed his password.

You can use this information to enforce security policies; for example, forcing the user to not reuse the five most recent passwords.

Changes in format of date and time fields for folders and application groups

The date- and time-related fields have been updated to support a broader range of dates. Support for the previous format remains and the name of the field types have been renamed to include "(old style)" to help differentiate between the previous format and the new format. To view the new format, you must use version 9.0 of the OnDemand administrative and Windows clients.

The number of indexer fields has increased to 128

The indexers have been enhanced to allow you to specify up to 128 fields as indexes.

Shutdown/startup enhancements

If a DB2 STOP is issued, ARSSOCKD will immediately terminate
If DB2 is not available, ARSSOCKD will wait for DB2 to start

The graphical indexer has been improved

The graphical indexer has been enhanced to improve functionality and usability.

Administrative Client enhancements

The administrative client has been enhanced to improve functionality and usability.

OS/390 Indexer enhancements

Indexes extended to 128

ACIF Indexer enhancements

Indexes extended to 128

PDF Indexer enhancements

Indexes extended to 128

Metadata date formatting

Floating triggers

Group triggers

Structured API enhancements

The structured APIs have been enhanced to improve functionality and usability.

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Client Topics

Enhancements

Export field data to a comma separated file

Export document data to a comma separated file

Enhanced interface allows end user to update document metadata

User security notifications

Send document list to a printer

Copy document data to file from document list

Compatibility

The Content Manager OnDemand Server 9.0 no longer supports Clients prior

to 8.5.0. This includes, but is not limited to, the Windows Client, ODWEK CGI/Servlet/Java APIs, CICS, etc. Please ensure the clients used to access your Content Manager OnDemand server are at currently supported levels. The Content Manager OnDemand 9.0 Server will only accept administration requests from the Windows Administrator or

arsxml

at the 9.0 level.

Content Manager OnDemand 9.0 Clients (Windows, ODWEK, etc) will only work against an 8.5 or later server.

The Content Manager OnDemand 9.0 arsxml will only work against an 9.0 Server

The Content Manager OnDemand 9.0 Windows Administrator will work against

any V8.5 server, but nothing earlier.
Minimum Windows Administrator Client level

The Windows Administrator Client must be at least at level 9.0.0.x
when

accessing the v9.0 OnDemand Server
Line data viewer applet

Line data viewer has been enhance to improve functionality and
usability

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Web Enablement Kit (ODWEK) Topics

Java API enhancements

New methods added to the Java APIs

- ODConfig
 - IN_OPERATOR_DELIMITER - Set a character to be used in IN operator queries. The space character is the default.
 - MAX_TRACELOG_SIZE - Used to set the maximum size in MB a trace log (arswww.trace) can grow to before it is renamed (arswww.trace.YYYYMMDD.HHMMSS) and a new trace log is created.
 - ODWEK_INSTALL_DIR - The ODWEK install directory for non-default install locations.
 - RES_CACHE_MAX - Defines the maximum space available for the use of a resource file cache.
 - RESOURCE_CACHE_DIR - This parameter will override the default ODWEK behavior or caching AFP Resources in memory.
 - SQL_WILDCARD_ESCAPE - Set a character to be used as a wild card escape character during SQL generation.
- ODServer
 - getMessageOfTheDay
 - getVersion
 - get/setMsgsLanguage
 - setPassThruToken
- ODUser
 - getLastLogonDate
 - getLastPasswordChangeDate
 - getNumDaysUntilPWExp - This method will return -1 if the Password Expiration Notification setting is set to Never Notify in the System Parameters
 - getNumFailedLogins
- ODFolder
 - clearAllFields
 - restoreCriteriaToDefaults - Restore the ODCriteria values and operators to their defaults
 - FTIAddHits - Add documents to the Full Text Index
 - FTIReleaseHits - Release documents to the Full Text Index
 - StoreDocument - Accepts a byte array as an argument for the storage object
- ODCriteria
 - getDescription

* Servlet deployment and the arsSVTInterface.class

The zOS ODWEK Java Servlet uses the servlets/ArsSVTInterface.class during operation. This class is part of the package (com.ibm.edms.od) and must be copied into a directory structure that mirrors the package structure. For example, after creating the subdirectories for the

directory '/usr/lpp/ars/V9R0M0/www/servlets/com/ibm/edms/od', copy the ArsSVTInterface.class file into this directory. The CLASSPATH used by the J2EE application server needs to include this directory reference (without the new '/com/ibm/edms/od' subdirectories referenced).

For example:

```
CLASSPATH=/usr/lpp/ars/V9R0M0/www/servlets/ArsWWWServlet.jar
/usr/lpp/ars/V9R0M0/www/servlets
```

* CGI and IBM HTTP Server settings for DefaultFsCp and DefaultNetCp
When using the IBM HTTP Server (IMWHTTPD), the following httpd.conf file settings were used for testing:

DefaultFsCp IBM-1047

DefaultNetCp UTF-8

The html files, such as /usr/lpp/ars/V9R0M0/www/samples/logon.htm, remained as EBCDIC files. The content body sent to the browser is UTF-8. The headers produced by the CGI are EBCDIC headers and handled properly by the IBM HTTP Server.

* Reminder to clear cache and temp

Before using the latest version of the Web Enablement Kit CGI/Servlet, you must delete all of the files from the Web Enablement Kit cache and temp directories. The directories are specified by the CACHEDIR and TEMPDIR directives in the arswww.ini file.

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Miscellaneous Topics

* Using separately priced features

In order to use any purchased OnDemand separately priced feature, you must install the appropriate feature install image.

- o OnDemand Distribution Facility (J272902)
- o Enhanced Retention Management (J272903)
- o PDF Indexer (J272904)
- o AFP Transforms (J272901)

- Information center:

<http://pic.dhe.ibm.com/infocenter/cmod/v9r0m0/index.jsp>

- Publication library (All PDF version of the documentation):

- MP: <http://www.ibm.com/support/docview.wss?&uid=swg2722033>
- z/OS: <http://www.ibm.com/support/docview.wss?&uid=swg27022034>

- Information roadmap:

<http://www.ibm.com/support/docview.wss?&uid=swg27009157>

- Product system requirements:

- MP: <http://www.ibm.com/support/docview.wss?&uid=swg27021456>
- z/OS: <http://www.ibm.com/support/docview.wss?&uid=swg27021524>

- Products overview:

<http://www.ibm.com/software/data/ondemand/>

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