IBM

IBM Power Development Platform

Setup Guide for IBM Informix

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You can use the IBM® Power Development Platform (PDP) to develop, test, and validate IBM Informix® solutions on the AIX® operating system. After reserving your PDP partition, which includes choosing the hardware configuration and operating system, install IDS on the partition. In this environment, you can set up and test various replication and high-availability clustering configurations.

ACCESS TO INFORMIX SOFTWARE IMAGES

You can access Informix software from a directory in the PDP infrastructure or download it from the Power Development Platform Software Access Catalog (PDP-SAC).

IDS images from the PDP Repository

The IDS images are in the*/stage/middleware/Informix* directory

Make sure that you reserved a PDP partition with AIX operating system, and then choose available IDS product for AIX

IDS images from the PDP-SAC -

If the PDP repository does not have the software that you need, you can download additional software from the PDP Software Access Catalog

The software is provided free of charge, however, the use of this software is limited to the Power Development Platform. You may not download, copy, install, or use the software on any other systems, including systems within your enterprise. If you need to have copies of these programs outside of the PDP,
visit - The Software Mall for more information.

Follow the steps in the PDP-SAC User Guide to install and set up a graphical user interface, and then open a Web browser to access the PDP-SAC Web site. After accessing the PDP-SAC, find and download an IDS installation image to your PDP partition.

IDS INSTALLATION

Use the following steps to install the IDS image on your PDP partition.

Installation for AIX

You can use the following commands to install IDS on your AIX system. These are intended as reference only, so you must verify that they are appropriate for your setup.

1. Become root: $ su –

2. Verify that the group informix exists

smit Select: **Security & Users**, then **Users**, and **List All Users**

If the group informix does not exist, then **Add a Group** with **group name** informix and **group id 203**

3. Add the informix user if it doesn't exist
smit Select: **Security & Users**, then **Users**, and **List All Users**

If the group Informix does not exist, then **Add a User** with the **User name** Informix and **user id** 203 and make sure it's part of the Informix group

4. Now, we need to see how much space we have in the system # lsvg –L rootvg Verify that the **Free PPs** is over 8000 megabytes.

If it is not, then please contact the pdp administrators for assistance

5. Use Smit to create a new filesystem

6. We will now set the IATEMPDIR environment variable to the directory we created.

7. Begin the IDS installation:
This will hold temporary files during the installation.

export IATEMPDIR=/informix/temp
smit

Select : System **Storage Management** and **then File Systems**
Select : **Add/Change/Show/Delete File Systems**
Select : **Enhanced Journal File System**
Select : **Add an Enhanced Journal File System**

This will bring up a window, make sure that **rootvg** is highlighted and press**Enter** Navigate to **Number of units** with the arrow keys and type in**4096** Navigate to **MountPoint** and type in **/informix** and press **Enter**

Exit smit

a. Now, mount the newly created file system # mount /informix

b. Change directory to the new file system # cd /informix

c. Extract the appropriate tar archive from the product image that you chose. For example: # tar xf /stage/middleware/Informix/IDS.11.70.AIX.CZMX6ML.tar

d. Create a /informix/temp directory # mkdir /informix/temp

8. Create a /Informix/IDS directory # mkdir /Informix/IDS

9. Make INFORMIXDIR /informix/IDS # export INFORMIXDIR=/informix/IDS

10. Make INFORMIXSERVER=mysystem # export INFORMIXSERVER=mysystem

11. Begin the IDS installation # ./ids_install

12. Follow the prompts to complete the installation, installing the product in /informix/IDS
   Press ENTER when asked "PRESS [ENTER] TO CONTINUE"
   Press ENTER to read and then 1 and then ENTER when presented with the License Agreement
   if the INFORMIXDIR environment variable is set correctly, /informix/IDS should be the default.

Otherwise choose /informix/IDS as the installation directory
   Choose 1 for Typical Installation and press ENTER

- When asked if you want to create a sample instance, choose no by pressing 2 and then press ENTER

- Press ENTER to continue after the list of files and directories is shown

- Press ENTER one last time to exit the installer

13. Now, become the informix user: # su - informix

14. For convenience, add the following lines to /home/informix/.profile

INFORMIXDIR=/informix/IDS export INFORMIXDIR PATH=$INFORMIXDIR/bin:$PATH export PATH

SETTING UP IDS INSTANCES

To set up IDS instances for replication or high-availability scenarios, use the *informixsetup.sh* shell script. The shell script and the *README.txt* file explaining its usage are in the */stage/middleware/Informix* directory.

The shell script will create the various types of IDS instances with sample databases, and servers for high-availability clusters or Enterprise Replication (ER). It performs the following steps as needed:

- Prompts for /INFORMIXSERVER (Default: keep current if set).
- Checks the system for unused SERVERNUMs and port numbers and assigns them
- Derives and modifies onconfig file parameters and sqlhosts file entries.
- Creates user set scripts for the instances created and cleanup scripts.
- Prepares the disk for dbspace file paths.
- Initializes the servers and adds dbspaces. Restarts servers as needed.
- Creates the Stores Version 7 database (stores7) with unbuffered logging.
- Defines replication servers and replicates for the customer table in both databases (for ER).
- Defines and enables the secondary servers defined (for high-availability clusters).
- Creates and displays a summary file of servers that were created and how to access them.

Steps to run the setup script

You can use the following commands to prepare the PDP partition environment, and then run the *informixsetup.sh* shell script. These are intended as reference only, so you must verify that they are appropriate for your setup.

NOTE: You may need to be root to access the setup script and README files. If so, cp it to the appropriate directory as root and then chmod +x to the setup script.

1   If you are not already user informix, become user informix: $ su – informix

2   Enter the installation directory that should also be the
        INFORMIXDIR: $ cd /informix/IDS

3.   Set the path to include $INFORMIXDIR/bin $ export
        PATH=$INFORMIXDIR/bin:$PATH

4.   Create directory for IDS instances under INFORMIXDIR, and then enter the directory:
         $ mkdir servers $ cd servers

5. Copy the setup script and *README.txt* file from the PDP Repository: $ cp /stage/middleware/Informix/informixsetup.sh . $ cp /stage/middleware/Informix/README.txt .

6. Set INFORMIXSERVER to a desired value: $ export INFORMIXSERVER=<your value>

7. To see the README.txt file, run: $ more README.txt

8. To see the shell script syntax, run: $ ./informixsetup.sh -
You can run *informixsetup.sh* with the proper option to configure the following scenarios.

Set up a Standalone Server (Standard): -std option
This option initializes a standard server. A standard server has no secondary servers defined.

Standalone
Server

Set up an HDR Pair: -hdr option

This option initializes a High Availability Data Replication (HDR) pair

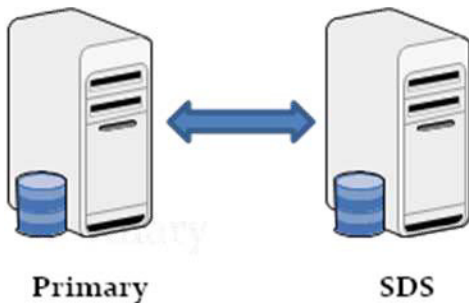Primary   HDR Secondary

Set up High Availability servers with RSS: -rss option

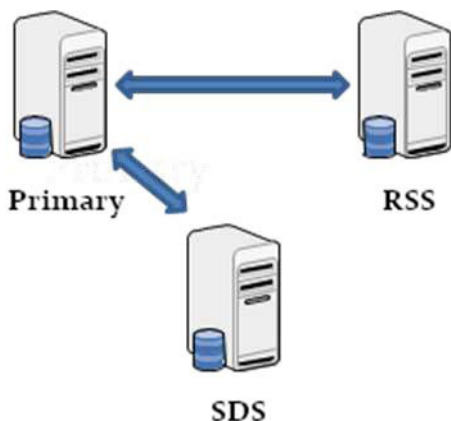This option initializes a Primary server and a Remote Standalone Secondary (RSS) server.
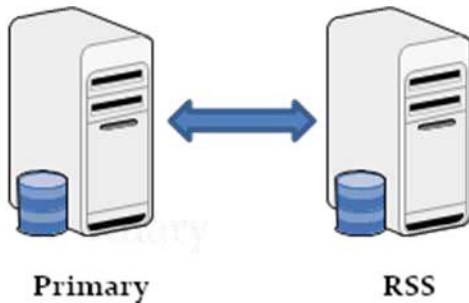
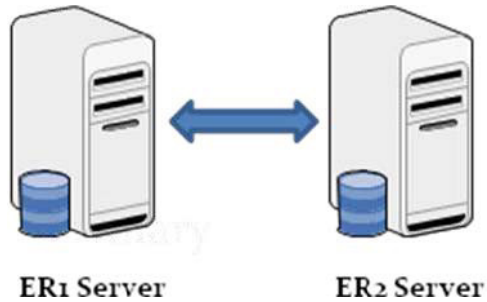Set up High Availability servers with SDS: -sds option

Set up a High Availability cluster (Primary, RSS, SDS): -ha option

This option initializes a Primary server with one RSS and one SDS server.
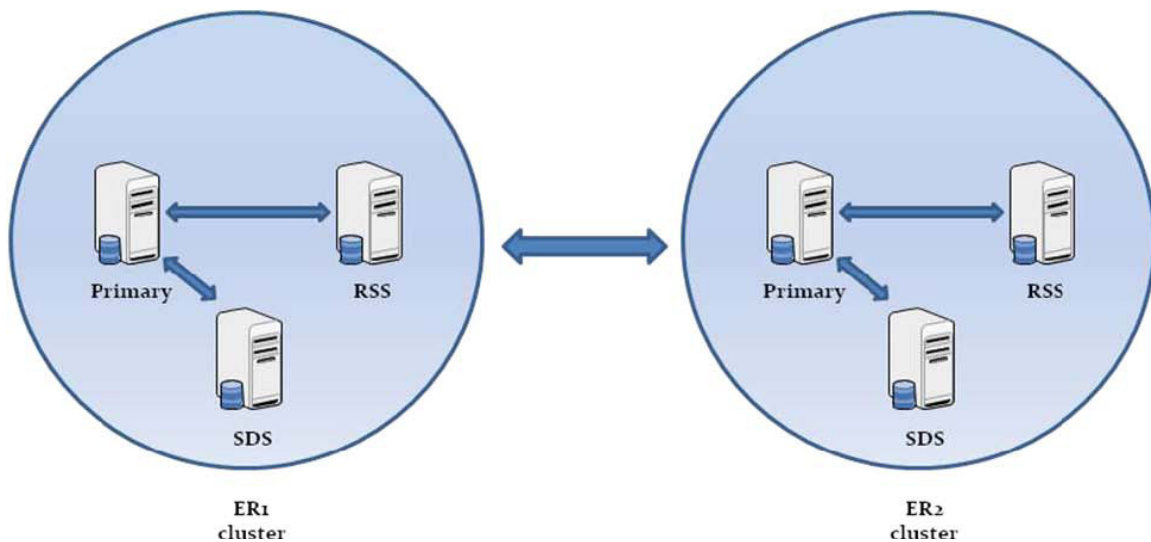

Set up an All Secondary cluster (Primary, HDR, RSS, SDS): -clst option

This option initializes an ER update-anywhere pair. There are no secondary servers defined in this option

ER1 Server   **ER2 Server**

Set up High Availability/ER clusters (2 Primary, RSS, SDS): -mcdr option

This option initializes two ER update-anywhere clusters with each ER cluster having one RSS and one SDS server.


Set up High Availability/HDR/ER clusters (2 Primary, HDR, RSS, SDS): -hcdr option

This option initializes two ER update-anywhere clusters with each ER cluster having one HDR Secondary, one RSS, and one SDS server.
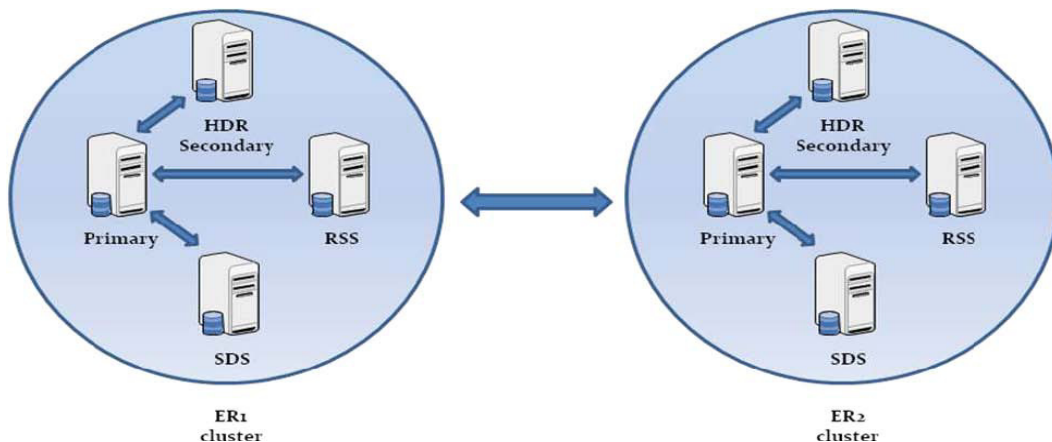
Set up a Flexible Grid (2 Standard): -grid option

This option initializes a Flexible Grid. There are no secondary servers defined in this option

ER1 Server   ER2 Server
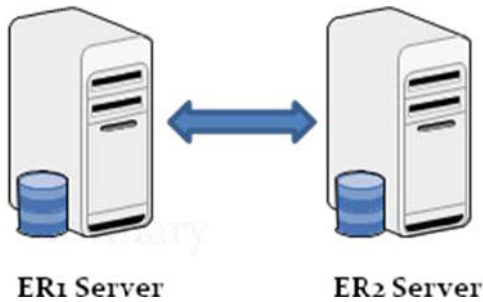
For detailed information about the options and scenarios presented in this document, refer to the *README.txt* file in the PDP repository and to the additional material.

ADDITIONAL MATERIAL

1. IBM Informix Dynamic Server v11.70 Information Center
2. PDP-SAC User Guide
3. PDP How-to use guide
4. Software Mall – IBM Software Access Catalog

TRADEMARKS -

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