z/OS Managed System Infrastructure for Setup workplace demo

This document describes how to set up and run a demo version of the z/OS Managed System Infrastructure for Setup (msys for Setup) workplace without connection to a real z/OS® host. The msys for Setup workplace code in this demo is a fully functional version. In addition to the workplace code, the demo contains code to simulate host processing and perform LDAP processing on a local LDAP server. This demo can run stand-alone without the need to have msys for Setup installed on a z/OS system or to have an LDAP server set up.

Prerequisites

The msys for Setup workplace demo requires this software environment:

Operating System	Windows NT® 4.0 with fix pack 4 (or higher) or Windows® 2000
Communications	TCP/IP must be configured and active.
Administrator rights	When installing the workplace code, the user ID used for performing the installation must have administrator rights on the workstation.

The msys for Setup workplace demo requires this hardware:

Processor	Pentium® or equivalent
Speed	300 MHz or higher
Memory	128 MBytes, 192 MBytes is recommended
Available disk capacity	100 MBytes
Screen resolution	800x600 (1024x768 recommended)

Installing the msys for Setup workplace demo

The msys for Setup workplace demo is packaged in the file **msysdemo-s<driver_version>.zip**, where **<driver_version>** stands for the current version of the msys for Setup workplace demo driver.

In order to install the msys for Setup workplace demo:

• Create a directory, for example, "msysdemo".

• Unzip msysdemo-s<driver_version>.zip into it.

Starting the msys for Setup workplace demo

Before you start the demo

Before you start the demo, you should read "Part 1. Introducing z/OS Managed System Infrastructure for Setup" on page xi in the *msys for Setup User's Guide* (SC33-7985-02) for a general introduction to msys for Setup.

This README guides you through the various tasks that you can do with msys for Setup. To save you the burden of having to read the entire User's Guide, pointers to the corresponding chapters in the User's Guide have been added to the README.This helps you to easily find the appropriate background information about each task. The pointers are shown at the beginning of a task in a box and provide the chapter name and page number where you can find the relevant information. In addition, the workplace contains comprehensive online help information.

Starting the msys for Setup workplace

You start the msys for Setup workplace demo by double clicking runopenldap.bat (if not already running), then msysWorkplaceDemo.bat in the Windows Explorer.
If you start the workplace demo without priming (see below), the local LDAP will be started as you left it the last time you used the workplace demo. Currently, the workplace demo is shipped in Refreshed state.

Priming the local LDAP before starting the msys for Setup workplace demo

The ideal way to demonstrate the capabilities of the workplace is by priming the local LDAP to a certain state before you start the msys for Setup workplace. For this purpose, a number of batch files are provided that let you load sample data into the local LDAP. This will allow you to skip tasks and demonstrate specific aspects of the msys for Setup workplace immediately.

To prime the local LDAP before starting the msys for Setup workplace demo, proceed as follows:

1. Ensure that no local LDAP is running. If necessary, shut down any active workplace demos.

2. Double click the appropriate batch file available in the subdirectory openldap in the msys for Setup demo directory. For a description of the available batch files, see the table below.

3. Start the workplace demo as described above.

The following batch files are available for priming the local LDAP:

To reach this state...	prime the local LDAP with this batch file...	Description of state - Ready to do what?
msys for Setup users defined	**ldap-users-created.bat**	The users presented in the table in section "Create users" below are available. **Ready to add sysplexes**.
Sysplexes and systems created	**ldap-sys-created.bat**	+ SPXDEMO and DEMOSYS1 are available. **Ready to create product sets**.
Product sets added	**ldap-pset-created.bat**	+ The product set "ServerPacDemo" is available. **Ready to refresh services**.
Services refreshed	**ldap-refreshed.bat**	+ All refreshable services are refreshed. **Ready to customize services**.
Customized	**ldap-customized.bat**	+ All customizable services are customized **Ready to update system configuration**.

Working with the msys for Setup workplace demo

Log on to Setup

In the **Log on to Setup** dialog, enter "ADMALL" as user and password "test".

Create users

msys for Setup User's Guide: "Managing users", p. 51.

To start with this task, prime the LDAP with...	Currently, a batch file that lets you start from scratch is not available. If you want to demonstrate how to create users, prime the local LDAP with **ldap-users-created.bat** and add additional users.

Perform the following tasks to create a new msys for Setup user:

- Log on to the msys for Setup workplace demo as **admuser** or **admall** and password "test".
- If message CIMW0563 appears, which tells you to update the LDAP schema version if necessary, click **OK**.
- In the resource tree, select the folder **Users**.
- In its context menu, click **New → User...**
- In the **Create new msys for Setup user** wizard enter a user ID and password and select the **Yes** radio button so that the user ID will be used for running jobs on the host automatically. Click **Next**.
- Enter a name, email address, and a description (for example, the user's responsibility or a phone number). Click **Next**.
- You can authorize the user for additional tasks. Click **Next**.
- You cannot authorize a user for selected services, because no product sets have been created yet, and, therefore, no services are known. Click **Next**.
- You can define if the user should be able to view or delete jobs other than their own. Click **Finish** to create the user. The user appears in the list view.

The following users are available in the workplace demo when the LDAP is primed with the batch file **ldap-users-created.bat**:

User ID	Authority	Service	Remarks
ADMUSER	Create users		
ADMPS	• Customize • Update system configuration	• Sysplex-wide settings • Operating system settings • Access Method Services • Storage Management Services	Can be used to demonstrate multi-user support on a Parallel Sysplex
ADMRACF	• Refresh management directory • Update system configuration	Security Server (RACF)	Can be used to demonstrate multi-user support on a Parallel Sysplex
ADMOTH	• Customize • Refresh management directory • Update system configuration	All other services, for example, Communications Server IP Service and ISPF	
ADMPKG	Manage product sets		All products sets
ADMSYS	Manage sysplexes and systems		Can be used to add sysplexes and systems
ADMALL	All of the above		LDAP Administrator; authorized to perform all the tasks described below.

Add a sysplex

msys for Setup User's Guide: "Managing sysplexes and systems", p. 91.

To start with this task, prime the LDAP with...	**Ldap-users-created.bat**

Perform these steps to create a new sysplex:

- In the resource tree (left side of the workplace), select the folder **Sysplexes.**
- In its context menu, click **New → Syplex...** This launches the "Add a Sysplex" wizard:
  - Read the introductory text and click Next.
  - As Sysplex name enter SPXDEMO and click Next.
  - The next panel informs you that you will have to create a system. Just read the text and click **Next**.
  - On the next panel, make the following entries:
    - · As system name enter DEMOSYS1.
    - · Click **Next**.
  - The job definitions on the next panels are filled with the settings you made when you created a product set, so you may just proceed without making any entries. Otherwise, make the following entries:
    - · For **Host** name type **localhost**
    - · For **FTP port** enter **2221**.
    - · Click **Next**.
  - On the JES and job card information panel, click **Next**.

- On the "Java information and Language Environment Library" panel, click **Next**.
- As **Log directory name** you may leave the default and click **Next**.
- On the next panel, leave **PRF_DEMOSYS1** as **System profile name**. Make the following entries:
  - Load member suffix: **00**
  - IODF volser: **IODF00**
  - Click **Next**.
- If you have created one or more Product Sets before, you may add them to the new system now (Note that this wizard page, which lets you select product sets, only appears when product set are available):
  - Select a Product Set and click **Add >**
  - Click **Next**.
- A progress indicator is shown while the sysplex, the system, and its system profile are created and the product sets are added.
- In the resource tree, expand the **Sysplexes** subtree to see what was added.

Add a product set

msys for Setup User's Guide: "Managing product sets", p. 75.

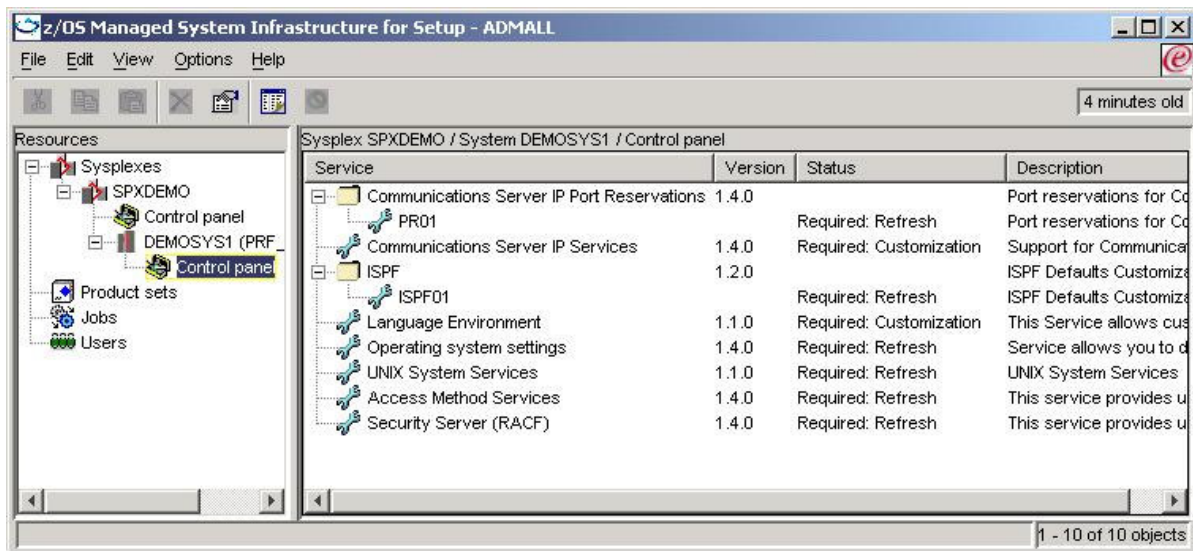| To start with this task, prime the LDAP with...	**ldap-sys-created.bat**

Perform these steps to add a new product set:

- In the resource tree (left side of the workplace), select the folder **Product sets**.
- In the context menu of **Product sets** click **New → Product set...**. This launches the "Add a Product Set" wizard:
  - Read the introductory text on the first panel and click Next.
  - On the next wizard panel, select the radio button I want to create the Product Set description from an up-to-date XML document. Make the following entries:
    - For **XML data set name**, enter **cim.demo.xml**.
    - Leave **Volser** empty and click **Next**.
  - Skip the next panel by clicking Next. The information requested on the panel will be taken from the XML data set. As described in the short text at the top of the panel, you could use this panel to define a different product set name and description.
  - Click Finish to start the job.
  - The "Run Product Set Job" panel pops up. If there is more than one system available, select one of them and click OK. On the "Run Product Set Job" panel, you do not need to click Start; the button is only enabled when you have to restart a job (for example, after it failed).
    - The job status changes first to "Starting...", then to "In progress", and finally to "Complete". When the job has finished, you are asked if you want to add the product set to a system. Click **YES**.
  - On the next panel, expand **SPXDEMO**, select system **DEMOSYS1** and click **Add>**. Then click **OK**.
  - You may be asked if **DEMOSYS1** should become the sysplex driving system. Click **OK** on this popup.
  - When the Product Set has been sucessfully added to the system, click **OK** to close the job notification popup.

- Cancel the "Edit Service Authorizations" panel. You would use this panel to authorize users for the services of the new product set.

- In the 'Product sets' list view you can see that the product set **ServerPacDemo** has been added.

- SPXDEMO is the sysplex for the new Parallel Sysplex plug-in, which has sysplex-wide scope. To see what this means, proceed as follows:

  · Expand **SPXDEMO** and select **Control panel**. In the list view, the service **Sysplex-wide settings** (among others) is listed. This means that the Parallel Sysplex can be customized and updated with sysplex-wide scope.

  · Expand **SPXDEMO > DEMOSYS1** and select **Control panel**. In the list view you will see the service **Operating system settings** (among other services). This means that the Parallel Sysplex also has *system-wide scope*.

  The scope was defined in the product definition XML (**cim.demo.xml**) of the Parallel Sysplex as `SCOPE = 'SYSPLEX,SYSTEM'.`

The figure below shows the workplace with the Control panel under DEMOSYS1 opened.

Refresh management directory

msys for Setup User's Guide: "Refreshing the management directory", p. 19.

To start with this task, prime LDAP with...	**ldap-pset-created.bat**

Perform these steps to refresh a service in the management directory:

- In the resource tree, expand **Sysplexes → SPXDEMO** and select **Control panel**. In the list view you see the service "Sysplex-wide settings" (among others) with the status "Required: Refresh".

- In the context menu of "Sysplex-wide settings", click **Refresh management directory...**. This brings up the **Refresh Management Directory** dialog:

  - Click Start refresh to start the refresh job on the simulated host.
    This will only refresh the management directory for "Sysplex-wide settings". Before you can customize "Sysplex-wide settings", the services Access Method Services, Security Server (RACF), and Storage Management Subsystem will need to be refreshed as well, because these are the services that the Parallel Sysplex (represented here as Sysplex-wide settings) specified as REQUIRED-SYSPLEX-REFRESH in the product definition XML (cim.demo.xml). Therefore, while

Access Method Services, Security Server (RACF), and Storage Management Subsystem do not need to be refreshed now, you will be forced to do so when you start customizing "Sysplex-wide settings" for the first time.

- The job status changes first to "Starting" and then to "In progress". When the job is complete, you will see a job notification indicating successful completion. Click **OK** to close the job notification window.

- You may click **View reports...** to see the results of the refresh. First a "Downloading..." information panel is shown for a short time. Then the "Report" panel shows the results in tree form. Click **Close** to close the panel.

- Click **Close** to end the Refresh dialog.

- In list view the status of "Sysplex-wide settings" has changed to "Required: Customization".

Customize

msys for Setup User's Guide: "Customizing a service", p. 25.

To start with this task, prime LDAP with...	**ldap-refreshed.bat**

In order to customize a Parallel Sysplex, you must customize both the "Sysplex-wide settings" and the "Operating system settings". These tasks are described below.

Customizing "Sysplex-wide settings"

- In the resource tree expand **Sysplexes** → **SPXDEMO** and click **Control panel.** In the list view you see the service "Sysplex-wide settings" with the status "Required: Customization".

- In the context menu of "Sysplex-wide settings" select **Customize...**

- As you read in section "Refresh management directory" above, the services Access Method Services, Security Server (RACF®), and Storage Management Subsystem will need to be refreshed before you can customize "Sysplex-wide settings". If those services are already refreshed (like it is if you primed LDAP with ldap-refreshed.bat), proceed with the next step. Otherwise the following steps are required:

  - The "Required refreshes" dialog pops up for Access Method Services, Security Server (RACF), and Storage Management Subsystem. Click **OK**.

  - The "Refresh Management Directory" dialog pops up. See section "Refresh management directory" above for information on how to perform a refresh. Click **Start refresh**.

  - A message box informs you that some services still need input before the first refresh can be performed. Click **OK** to close the message box.

  - A Security Server (RACF) dialog comes up. Click **OK** to close it.

  - Once the refresh is complete, retry **Customize** for "Sysplex-wide settings".

- The "Work in progress" panel comes up, indicating that the customization plug-in is being loaded. At completion, the "Sysplex Options" panel is displayed.

- Select **Parallel Sysplex configuration** and click **Customize** to bring up the "Customization Center" panel.

- Click **OK** to launch the "Parallel Sysplex" wizard:

  - Go through the wizard clicking **Next >** without entering anything until the **Finish** button is enabled.

  - Click **Finish**.

- In the "Sysplex Options" panel, click **Save**.

- A message box pops up asking you to customize the operating system settings for at least one system. Click **OK** to close the message box.

- The "Work in progress" information panel is displayed while the update requests are checked. When the check is complete, a message box pops up inquiring if you want to prepare update requests. Click **No** for now.
- The status of "Sysplex-wide settings" has changed to "Required: Prepare updates".

Customizing "Operating system settings"

- In the resource tree expand **Sysplexes → SPXDEMO → DEMOSYS1** and click **Control panel.** In the list view you see the service "Operating system settings" with the status "Required: Customization".
- In the context menu of "Operating system settings" click **Customize**.
- The "Work in progress" panel comes up, indicating that the customization plug-in is being loaded. At completion, the "Customization Center" panel is displayed.
- Select **Consoles** and click **Customize** to launch the "Operating system settings" wizard:
    - Go through the wizard clicking **Next >** without entering anything until the **Finish** button is enabled.
    - Click **Finish**.
- On the "Customization Center" panel, click **Save**.
- The "Work in progress" information panel is displayed while the update requests are checked. When the check is complete, a message box pops up asking you if you want to prepare update requests. Click **No** for now.
- The status of "Operating system settings" has changed to "Required: Prepare updates".

You can also customize additional services that are in the status "Required: Customization". Note, however, that the task "Update system configuration", which must be performed after a service has been customized, cannot be performed for the following services in the workplace demo:

- ISPF
- Language Environment
- UNIX System Services

Update system configuration

msys for Setup User's Guide: "Updating a system configuration", p. 31

To start with this task, prime LDAP with...	**ldap-customized.bat**

Restrictions for updating system configurations in the workplace demo

For the workplace demo the following restrictions apply:

- You can perform "Update system configuration" only for services of the following products:
    - Parallel Sysplex
    - Communications Server IP Service
- You cannot run "Update system configuration" for the following services, although the entries in their context menus will be enabled:
    - ISPF
    - Language Environment
    - UNIX System Services
    - LDAP Directory Server
    - TCP/IP Communications Server IP Port Reservation

Updating the configuration of sysplex-wide settings

- In the resource tree expand **Sysplexes → SPXDEMO** and click **Control panel**. In the list view "Sysplex-wide settings" has the status "Required: Prepare updates".

- In the context menu of the item, click **Update system configuration...**.
- A progress window informs you that requests are being generated.
- Eventually, **"**Update center: Sysplex-wide settings" panel pops up:
  - The **System configuration status** is "Required: Prepare updates". In the list view you see the services against which "Sysplex-wide settings" has requests, namely, "Sysplex-wide settings" itself, the Security Server (RACF), Access Methods Services, and the Storage Management Subsystem.
  - Select **Prepare updates** to start the "Prepare update" job on the simulated host.
  - A message box informs you that updates will be committed for the Security Server (RACF) and Access Methods Services. Click **Yes** to close the message box.
  - At the completion of the prepare job, you will see a job notification indicating successful completion.
  - Click **OK** to remove the job notification window.
- The **System configuration status** of "Sysplex-wide settings" has changed to "Required: Commit updates".
- You may select the **View reports** radio button to view the results of the prepare. A "Downloading.." information panel is shown for a short time. Then message CIMW0006 may pop up informing you that one or more log files could not be loaded. This occurs only if old reports have been deleted. However, some reports should appear in the list.
- Select a report and click **View....** The "Reports" panel will show the results in tree form.
- Click **Close** to close the "Reports" panel.
- If you want to continue later, you can now click **Close** in the "Update center". You may later return to the task by selecting "Update system configuration..." for the service "Sysplex-wide settings" in the list view.
- To continue with the update immediately, select the **Commit updates** radio button to bring up the "Commit updates" panel.
- Click **Commit updates**.
- A message box informs you that you must commit updates for the system before an IPL of the system.
- At the completion of the Commit job, you will see a job notification indicating successful completion. Click **OK** to close the job notification window.
- The system configuration status of Sysplex-wide settings has changed to "Completed: Commit updates".

Undo updates for "Sysplex-wide settings"

Before you can perform this task, "Update system configuration" for "Sysplex-wide settings" must have completed successfully with status "Completed: Commit updates".

- In the resource tree expand **Sysplexes** → **SPXDEMO** and click **Control panel.** In the list view "Sysplex wide settings" is listed (among other services).
- In the context menu of "Sysplex-wide settings", click **Undo system configuration updates...** to display the "Undo Updates center: Sysplex-wide settings":
  - The system configuration status should be "Completed: Commit updates". In the list view you will see the services against which Parallel Sysplex (represented by "Sysplex-wide settings") has committed requests, namely, Sysplex-wide settings itself, Security Server (RACF), Storage Management Subsystem, and Access Method Services.
  - Select **Undo all updates** to start the Undo updates job on the simulated host.
  - A message box informs you that this action includes removing updates to the services Security Server (RACF), Storage Management Subsystem and Access Method Services, Click **YES**.

- At the completion of the Undo updates job, you will see a job notification indicating successful completion. Click **OK** to close the job notification window.

- The System configuration status of Sysplex-wide settings has changed to "Required: Commit undone updates".

- You may select the **View reports** radio button to display the "View reports" panel. After you select a report entry in the list, first a "Downloading.." information panel will be shown for a short time. Then the "Reports" panel will show the results in tree form. Click **Close** to close the "Reports" dialog.

- If you click **Close** in the "Undo Update Center", you can continue later by selecting "Undo system configuration updates..." for "Sysplex-wide settings". If you want to continue immediately, select the **Commit undone updates** radio button to display the "Commit undone updates" page on the right side of the "Undo Update Center" panel.

- At the completion of the commit job, you will see a job notification indicating the successful completion. Click **OK** to close the job notification window.

- The system configuration status of Parallel Sysplex has changed to "Completed: Commit undone updates".

Additional functions you may be interested in

Working with multiple product sets

To demonstrate the capability of the msys for Setup workplace to handle multiple product sets per system, you can use the following two product sets:

Product set name	XML file	Services	Remarks
Model-Product	cim.demo.model.xml	Model-Product	has dependencies on the following services in product set JDBC/SQLServ: JDBC support for Model-Product SQL support for Model-Product
JDBC/SQLserv	cim.demo.jdbcsql.xml	JDBC support for Model-Product SQL support for Model-Product	multiple instance service
msys Tutorial	cim.tutorial.xml	Basic Functions Advanced Features Focused Requests Interacting Controllers Cross System Features	see the msys Tutorial for more details

The table above shows the product sets, the services, and the dependencies of the services across product sets.

To add these product sets follow the description provided for product set ServerPacDemo above and add them to e.g. a system named DEMOSYS2 in a new sysplex SPXMODEL.

Creating new service instances

You can use a service template to create services. To do this for ISPF, do the following:

• In the resource tree expand **Sysplexes → SPXDEMO → DEMOSYS1** and click **Control panel**. A list of available service instances is diplayed in the list view.

• In the context menu of the service instance ISPF, select **New → Instance...** to bring up the "Create new service instance" dialog.

• Enter the name for the new instance (for example, **profile-1**). Internally, the instance is also identified by a number, the so-called instance ID, which you will normally not see but can look up in the properties of the service instance.

• Click **OK** to add the new service instance as a child node to the ISPF folder.

• Optionally, you can provide input for the new service instance. For now, click **No**.

Value changed in parameter..	Value in previous version	Value in Adagio driver 32 and higher
DN=..ibm-msysConfigurationId	IMG001 or IMG002	PRF_SYS1 only
DN=... ibm-msysProductHome	SVPAC1 or SVPAC2	XMLPSET only
LDAP_USER_DN=	Racfid=bwsc,profiletype=user ,sysplex=msysplex	PrincipalName=ADMALL,ibm-msysDiscipline=setup,ou=msys, o=ibm,c=us???
LDAP_PASSWORD=	secret	"" (two double-quotes)

Cleaning up log and trace files

The log and trace files of the simulated host jobs are by default written into the subdirectory **work/var/cim/log** in the demo directory. If you run a lot of jobs from the workplace, logs and traces may accumulate and use a considerable amount of disk space. This is especially true if you are tracing with a high host trace level.

How can you recognize trace files? Trace file names start with **TRC.** It is safe to delete all trace files because they are not used by the msys for Setup workplace.

How can you recognize log files? Log file names start with **LOG.** If you delete log files, this may affect the browsing of reports from previous jobs. In such a case you may encounter a message informing you that some log files could not be found. This means that it is best to delete the oldest log files first if they take up large amounts of disk space.

If you run into problems

• If you cannot expand the folders in the resource tree right after logging on to the workplace demo, the local LDAP did not start correctly. In such a case, just retry launching **runopenldap.bat**.

• If you run into memory problems, try the following workaround which let's the Java™ environment use less storage, without sacrificing too much performance:

– Close the msys for Setup workplace demo.

– Locate the file `jitc.dll` in msysdemo in folder **jre\bin**, and rename it to `jitc.dll_`.

– Restart the msys for Setup workplace demo.

• If you work with the update center and, for example, a "Prepare updates" job has finished, you may proceed quickly with "Commit updates" and start the next job. If you do this, the new job may not start because the previous host session has not finished yet. To avoid this, you must wait a few seconds until the previous session has finished, *before* you start the next job. You can tell if the previous session still exists by looking at the toolbar. If the last entry in the toolbar is a command window, this is

the open session, and you must wait until that entry disappears. The problem exist in the workplace demo only.

- In the current version you cannot:
    - refresh ISPF (this is <u>only a demo problem</u>)
    - bring up help for the customization dialogs of the "Language Environment" panel.

If you have further questions ...

... contact us at msys@de.ibm.com.

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