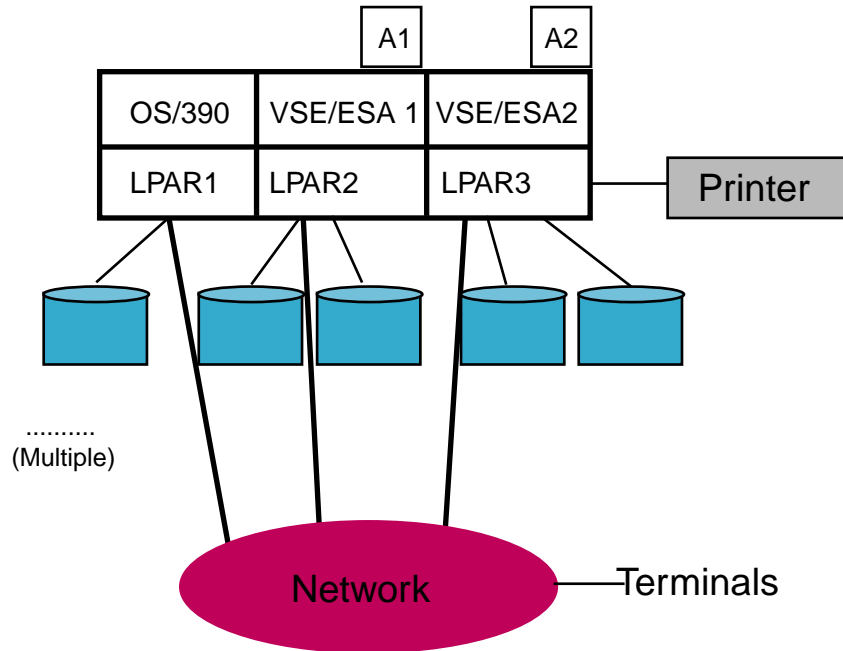


Test Plan for DOS/VSE/ESA under OS/390 Using ISX:

To implement and test a typical DOS/VSE/ESA customer configuration in an OS/390 ISX environment without any hardware or software changes to the existing OS/390 LPAR.

1. Existing customer Environment--Configuration "A" (LPAR Only)- to be ported to OS/390 ISX:




Configuration "A" corresponds to present IBM VSE/ESA to OS/390 migration proposal using Multiprise 3000.

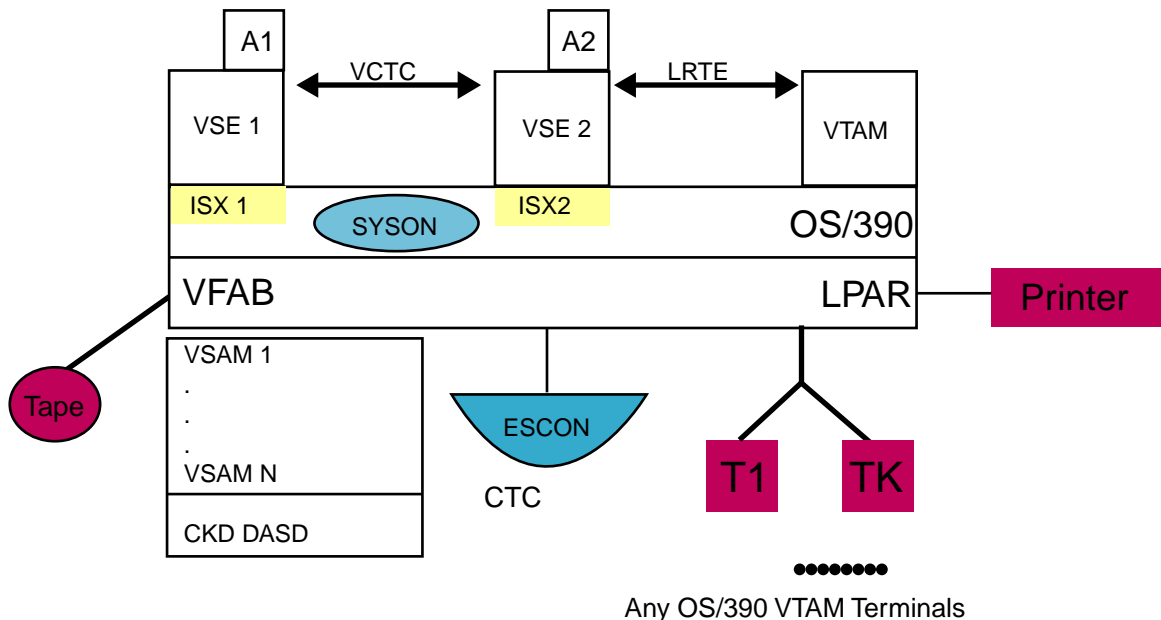
LPAR 1 = target OS/390

LPAR 2 = VSE production

LPAR 3 = VSE testing

DASD Volumes 

A1, A2 = customer applications



ISX/390 AND VSE/ESA FUNCTIONAL TEST

1.0 ISX/390 TEST

ISX/390 test performed in Waltham during 2/28-3/03/2000

1.1.1 TEST ENVIRONMENT

The ISX/390 test has been performed on a STARTER-PAK with XXMB storage. One OS/390 operating system and two VSE/ESA operating systems had been set up:

DASD Type	Operating System	Used As
real CKD 3390	OS/390 2.8	HOST
real CKD 3390	VSE/ESA 2.4	GUEST
emulated FBA	VSE/ESA 2.1+	GUEST

1.1.2 TEST ACTIVITIES

1.1.2.1 Test environment installation and set up steps.

The following preliminary steps have been done:

1. Installing ISX/390 on OS/390 running as host. ISX/390 load library was installed from tape 3490 into OS/390 partitioned data set ISX.LINKLIB on DASD 3390 by means of OS/390 IEBCOPY utility program. ISX.LINKLIB was APF-authorized in OS/390 with the operator command SETPROG APF,ADD,DSN=ISX.LINKLIB,VOL=DMT03.
2. Installing DDRXA stand-alone program. The stand-alone program DDRXA was installed from tape 3490 into OS/390 partitioned data set ISX.JOBLIB on DASD 3390 by means of OS/390 IEBCOPY utility program as DDRXA member.
3. Allocation and loading VSAM data sets in OS/390 for emulated FBA DASDs. The data sets VSE.DOSRES and VSE.SYSWK1 were defined in OS/390 by means of OS/390 IDCAMS utility program. The data sets were loaded by means of ISX/390 ISXFBI utility program. The emulated FBA DASDs are designed to install VSE/ESA 2.1+ operating system.
4. Preparation of ISX/390 job to IPL DDRXA via emulated card reader device. IPL and run DDRXA under ISX/390 to restore VSE/ESA 2.1+ image from the magnetic tape to emulated FBA DASDs. ISX/390 job was prepared to IPL and run DDRXA stand-alone program from card reader device emulated via OS/390 DDRXA member of the data set ISX.JOBLIB. The following ISX/390 command was used to define the card reader device: DEFINE RDR 00C DSN ISX.JOBLIB(DDRXA). VSE/ESA 2.1+ operating system image was restored from tape 3490 into emulated FBA DASDs.

5. Preparation of ISX/390 job to run VSE/ESA 2.4 located on real DASD and ISX/390 job to run VSE/ESA 2.1+ on emulated FBA DASD in OS/390 environment. The following configuration was defined to run VSE/ESA 2.4 operating system: two real 3390 DASDs with the device numbers 1F0, 1F1; two locally connected display units with the guest device numbers 000, 200 emulated via one OS/390 VTAM terminal; card reader with the guest device number 00C, card punch with the guest device number 00D, and printer with the guest device number 00E emulated via OS/390 data sets for data exchange between VSE/ESA 2.4 guest system, VSE/ESA 2.1+ guest system, and OS/390 host system; one emulated Channel-To-Channel adapter with the guest device number E41 for connection VSE/ESA 2.4 guest system with VSE/ESA 2.1+ guest system; one emulated token-ring ICA adapter with the guest device numbers 400-403 for connection VSE/ESA 2.4 with the virtual token-ring. The following configuration was defined to run VSE/ESA 2.1+ operating system: two emulated FBA DASDs with the guest device numbers C00, C01; two locally connected display units with the guest device numbers 000, 4C1 emulated via one OS/390 VTAM terminal; card reader with the guest device number 00C, card punch with the guest device number 00D, and printer with the guest device number 00E emulated via OS/390 data sets for data exchange between VSE/ESA 2.1+ guest system, VSE/ESA 2.4 guest system, and OS/390 host system; one emulated Channel-To-Channel adapter with the guest device number E41 for connection VSE/ESA 2.1+ guest system with VSE/ESA 2.4 guest system; one emulated token-ring ICA adapter with the guest device numbers 400-403 for connection VSE/ESA 2.1+ with the virtual token-ring.
6. Preparation of ISX/LSA job to emulate LSA token-ring adapter for OS/390 running as host and to connect OS/390 with the virtual token-ring of ISX/390. Real Channel-To-Channel adapter with the device number E20 was defined for ISX/LSA to emulate OSA/2 LSA token-ring adapter for OS/390. Real Channel-To-Channel adapter with the device number E40 (it is the opposite side of E20) was defined in OS/390 as OSA/2 LSA token-ring adapter.
7. Definition of CTC and token-ring adapters in OS/390, VSE/ESA 2.4, and VSE/ESA 2.1+ operating systems. The Channel-To-Channel adapter E40/E20 was previously defined in OS/390 I/O configuration. The following I/O devices were included in the I/O configuration of VSE/ESA 2.1+ operating system: CTC with the device number E20, CTC with the device number E41, token-ring ICA adapter with the device numbers 400-403. The following I/O devices were included in the I/O configuration of VSE/ESA 2.4 operating system: CTC with the device number E41, token-ring ICA adapter with the device numbers 400-403. LAN major nodes VTAM definitions are prepared in both VSE/ESA systems. XCA major node is prepared in OS/390 for connection through virtual token-ring. CCA major nodes VTAM definitions are prepared in both VSE/ESA and OS/390 for connection through real and emulated Channel-To-Channel adapters. Path definitions, CDRM, and CDRSC major nodes are prepared in all systems. POWER is prepared for PNET working in VSE/ESA 2.4 system. NDT tables are prepared in both VSE/ESA systems for connection with

OS/390 JES2 NJE. OS/390 JES2 NJEDEF is prepared for connection with VSE/ESA POWER.

8. IPL and run VSE/ESA 2.4 system as the guest of OS/390 host.
9. IPL and run VSE/ESA 2.1+ system as the guest of OS/390 host.

1.1.2.2 Testing of VSE/ESA guests in OS/390 host

The following tests have been done:

1. Execution of data processing jobs in both VSE/ESA 2.4 guest and VSE/ESA 2.1+ guest. All VSE/ESA tuning works (such as copy, catalog, delete the members of partitioned data sets, assembling the VTAM tables, creation of the new sublibraries, etc) are performed in both VSE/ESA 2.4 and VSE/ESA 2.1+ running as the guest systems of OS/390.
2. Preparation of jobs for VSE/ESA systems in OS/390 and reading the jobs in VSE/ESA via emulated card reader devices. Sending print files from VSE/ESA to OS/390 host via emulated card punch and printer devices.
3. Logon to VSE/ESA 2.1+ CICS application program from VSE/ESA 2.4 VTAM terminal and from OS/390 VTAM terminal via emulated CTC connection of VSE/ESA 2.4 with VSE/ESA 2.1+ and via real CTC connection of OS/390 with VSE/ESA 2.1+.
4. Logon to VSE/ESA 2.4 CICS application program from VSE/ESA 2.1+ VTAM terminal and from OS/390 VTAM terminal via the same CTC connections of the systems.
5. Logon to OS/390 TSO application program from VSE/ESA 2.4 VTAM terminal and from VSE/ESA 2.1+ VTAM terminal via the same CTC connections of the systems.
6. Data transfer between POWER queue of both VSE/ESA systems and OS/390 spool using PNET /NJE feature via the same CTC connections of the systems.
7. Run ISX/LSA job to emulate LSA token-ring adapter for OS/390. The connection of OS/390 with VSE/ESA 2.1+ system and connection of both VSE/ESA systems were set up via virtual token-ring and emulated LSA adapter.
8. Data transfer between POWER queue of both VSE/ESA systems and OS/390 spool using PNET/NJE feature via the virtual token-ring connections of the systems and emulated LSA adapter.
9. Logon to OS/390 TSO application program from VSE/ESA 2.4 VTAM terminal and from VSE/ESA 2.1+ VTAM terminal via the virtual token-ring connections of the systems and emulated LSA adapter.

10. Logon to VES/ESA 2.1+ CICS application program from VSE/ESA 2.4 VTAM terminal and from OS/390 VTAM terminal via the virtual token-ring connections and emulated LSA adapter.
11. Logon to VSE/ESA 2.4 CICS application program from VSE/ESA 2.1+ VTAM terminal and from OS/390 VTAM terminal via the virtual token-ring connections and emulated LSA adapter.

1.1.3 SUMMARY

The installation and usage of ISX/390 is simple.

Stand-alone programs can run under ISX/390 in OS/390 environment.

The guest VSE/ESA systems seem to run adequate performance.

It would be interesting to install other operating systems, like OS/390, and LINUX/390 as guest under ISX/390.