Best practices with SUSE Linux Enterprise Server Starter System and extentions

Ihno Krumreich
Project Manager for Linux on System z
Ihno@SUSE.de
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Starter System for System z

- Reasoning
- Requirements
- Installation
- Configuration
- Extending the Starter System

Starter System for System z

Why do we need a starter system?

- Linux cannot be installed from DVD on System z, a network installation is required.
- Security policies can make it difficult to have an installation server outside of System z
- To have an installation server, a linux system need to be installed and on this server the installation media

  -> The Starter System is a ready to run linux with the needed installation media integrated.

Starter System for System z

Requirements

- z/VM
- two Model-3 disks permanent and one Model-3 during installation
- a VSWITCH interface in z/VM
- FTP in z/VM

Starter System for System z

Installation

- Create the z/VM guest
  - three minidisks (one only needed during installation)
  - format the three disks
- Transfer the three images and two files to the guest
- execute INVMARC exec to unpack and restore the images
- ==> now the LINUX system is installed on the disks

Starter System for System z

Installation (user direct entry)

```
USER NOVSTART PASSWORD 512M 512M G
  MACHINE XA 2
  CPU 0
  CONSOLE 0009 3215 T CONLOG
  SPOOL 000C 2540 READER *
  SPOOL 000D 2540 PUNCH A
  SPOOL 000E 1403 A
  LINK MAINT 0190 0190 RR
  LINK MAINT 019E 019E RR
  LINK MAINT 019D 019D RR
  NICDEF 0340 TYPE QDIO LAN SYSTEM GLAN1
* MDISK 0191 3390 0001 0005 USER01 MR RIAMSL WIAMSL MIAMSL
* MDISK 019F 3390 0006 0050 USER01 MR ALL    WIAMSL MIAMSL
* MDISK 0150 3390 0056 3283 USER01 MR RIAMSL WIAMSL MIAMSL
* MDISK 0151 3390 0001 3338 USER02 MR RIAMSL WIAMSL MIAMSL
* MDISK 0F00 3390 0001 3338 TEMP01 MR RIAMSL WIAMSL MIAMSL
```

Starter System for System z

Configuration

- execute the REXX-script
  NETNEW NETWORK PARMS
  - Hostname, Domain, IP-Number, Gateway and other parameters can be set and/or modified
  - This script can be used at a later point in time if such a parameter changes
  - save your changes.
  - now the LINUX system can be started with the following command:

    IPL 150 CLEAR

Starter System for System z

Configuration

- Set a new root-password after the system is started
- In case the network parameters are wrong or need to be changed, remove the following file in the linux:

  rm /etc/Startsysten_already_configured

  and reboot the system

Starter System for System z

Install a Linux system

- Create the user direct entry
  This guest should have the following disks:
  - A link to MAINT 190 (for use by CMS)
  - a link to NOVSTART 19F (install scripts)
  - 191 for CMS startup and configuration
  - Other disk(s) for the linux system
- Start *SLES*
  This will load the installation system into the card reader and start the installation.

Starter System for System z

extending the starter system

The starter system resides on a lvm which can be extended. This way additional releases of SLES can be hosted on the same guest.

- add a disk with YaST
- add the disk to the lvm system volume
- resize the filesystem
- add the dvd to /srv/ftp/SLES11/??

Questions?
now or later at
lhno@SUSE.de

Thank you.


suse®

Corporate Headquarters
Maxfeldstrasse 5
90409 Nuremberg
Germany

+49 911 740 53 0 (Worldwide)
www.suse.com

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