

## IBM Now Factory Appliances Type 4561 Problem Determination and Service Guide

### Service information for: 4561-425 / 4D5

If your Lenovo System x Server was purchased as part of an IBM Now Factory Appliance, certain information contained in the product documentation may or may not apply to your particular product. Information that may differ is:

1. The warranty period
2. Parts replacement procedure
3. Service support call flow

The information in this document supersedes the Problem Determination and Service Guide for IBM System x3650 M5 Type 8871. The table below maps the IBM Security Appliance Model to the Lenovo System x Model.

Appliance Name	Appliance Machine Type Model	Lenovo System X Name	Lenovo System X Machine Type Model
IBM Now Factory Sourceworks 2060 Data Collector (AC Power)	4561-425	System x3650 M5	8871-AC1
IBM Now Factory Sourceworks 2060 Data Collector (DC Power)	4561-4D5		

This Product is not intended to be connected directly or indirectly by any means whatsoever to interfaces of public telecommunications networks.

本製品は、電気通信事業者の通信回線への直接、またはそれに準ずる方法での接続を目的とするものではありません。

#### Chapter 4. Parts listing

Field Replaceable Unit (FRU): FRUs must be installed only by trained service technicians. On-Site installation of FRUs is included at no additional charge as part of your Now Factory Appliance Support entitlement.

In addition to the list of FRUs in the table below, all structural parts, and Tier 1/Tier 2 parts listed in the Problem Determination and Service Guide for Lenovo System x3650 M5 Type 8871 are delegated as FRUs for your IBM Now Factory Appliance Type 4561.

Description	FRU Part Number
1m MTP-4xLC OM3 MMF Breakout Cable	00LT603
5m OPTC CABLE-FTS MM	00LT605
5m SM MTP12 to 4 LC Breakout Cable	00VM572
QSFP+ 40GBase PLRL4 Transceiver	00VM573
CD-POP Fiberblaze 40G FRU	00VM967
10m QSFP+ MTP-MTP OM3 MMF Cable	00VX002
1.2TB 2.5" SAS HDD	01GV021
LC-LC Coupler	12R9911
4m SM LC-LC Cable	15R9387
KIT - FIBER TOOL	45D3371
LC-LC Adapter	45W1375
SFP+ SR Transceiver	46C3449
QSFP+ 40GBase LR4 Transceiver	78P2593
QSFP+ 40GBase SR4 Transceiver	78P3674

(P) P/N: 00VM844



(2P) EC L68930



(4L) Origin: MX



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## Chapter 5. Removing and replacing server components

IBM Service Technician should follow the Problem Determination and Service Guide for Lenovo System x3650 M5 Type 8871 to remove, replace, and/or install all parts.

**Important:** The Now Factory appliances utilize firmware that is independent of the Lenovo System x3650 M5 Type 8871 firmware. Any component replacements requiring firmware update are to refer to the IBM Now Factory support documentation referenced in Appendix A of this document for the correct firmware packages.

### Replacing the System Board

The IBM Service Technician should follow Removing and Replacing System Board Instructions in the Problem Determination and Service Guide for Lenovo System x3650 M5 Type 8871.

**Important:** Before replacing the System Board, the IBM Service Technician should record all system configuration information, including the Vital Product Data (Machine Type, Model Number, Serial Number, and Asset Tag)

1. The Lenovo Machine Type, Model Number and Serial Number will be stored in the VPD fields for Machine Type, Model Number and Serial number, respectively.
2. The Appliance Machine Type, Model and Serial Number will be combined and stored in the VPD Asset Tag field in this format:

```
SYSTEM_PROD_DATA.SysEncloseAssetTag: AAAABBB1234567
```

Where AAAA is the Appliance MT, BBB is the Appliance Model, and 1234567 is the Appliance Serial Number.

**Important:** The IBM Service Technician is responsible for reactivating Features on Demand keys after a hardware replacement. The IBM Service Technician should follow the FOD instructions located in Appendix B of this document.

### Replacing Fiberblaze PCIe Cards

IBM Service Technician should follow removing/installing the PCI riser-card assembly instructions in the Problem Determination and Service Guide for Lenovo System x3650 M5 Type 8871.

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## Appendix A. Getting help and technical assistance

### Using the documentation

Please visit

[https://www-947.ibm.com/support/entry/portal/product/information\\_management/now\\_factory?productContext=291085985](https://www-947.ibm.com/support/entry/portal/product/information_management/now_factory?productContext=291085985)  
for information on how to obtain the latest documentation for your Now Factory Appliance.

### Software and Hardware service and support

When calling IBM for service please select the Software Service Option as the Product type for your IBM Now Factory Appliance. You are required to provide your IBM Customer Number for Support.

**Important:** All Service Support calls should be directed to the ISM Software Support Line. The Software support team owns the engagement with the customer and will engage the hardware support team when necessary.

## Appendix B. IBM SWG Appliances - FoD Key Installation after Hardware Replacement

### Summary

This document provides the steps required to re-install the Feature-On-Demand (FoD) keys, which were previously purchased and installed on an IBM SWG Appliance customer machine. This procedure must be completed after a planar or RAID part replacement to restore full functionality to the customer's machine post hardware replacement activity.

### Preparation (steps 2-6 can be performed before arriving at customer site)

1. If the machine will boot successfully and the part being replaced is a planar, then boot using BoMCsft2. Use BLUE MENU option #3 'Backup and Restore All System Settings' to 'Backup' (sub-option #1) the planar configuration settings (which includes FoD keys) onto the USB key. If successful, then skip to Parts Replacement section below. Otherwise, then proceed to step #2.
2. The FoD must be obtained from the Lenovo FoD Portal:  
<https://fod.lenovo.com/lkms/angular/app/pages/index.htm#/welcome> .  
If you do not yet have access to the website via Lenovo sign-on, register using this link:  
<https://fod.lenovo.com/lkms/angular/app/pages/index.htm#/register>
3. After signing in, select 'Retrieve History'.
4. Select 'Search history via machine type serial number', then enter the System x Machine Type and Serial Number in the search value field. Format: MMMSSSSSSSS where M = Type, S = Serial. Ensure uppercase letters are used. Do NOT use the Appliance Machine Type and Serial Number.
5. Download all of the listed .key files to your root directory of your BoMCsft2 USB Key.
6. You may refer to or download a copy of the FoD User's Guide from Lenovopress:  
<https://lenovopress.com/redp4895-using-system-x-features-on-demand> \*Note: The doc still references the IBM FoD support portal but use the Lenovo FoD support site (see step 2).

### Parts replacement (onsite)

1. Perform parts replacement as per Installation & Service Guide (ISG), Problem Determination & Service Guide (PDSG), or Problem Determination & Service Guide Addendum, whichever is applicable to this SWG Appliance.

### Installation Steps (onsite)

1. Boot the machine using BoMCsft2.
2. If you were able to 'Backup' the planar configuration prior to parts replacement, then skip to step #4. Otherwise, using BoMCsft2's BLUE MENU option #4 set the VPD information according to the information in the PDSG Addendum (System x M/T and Serial are most commonly used).
3. Using BLUE MENU option #5 'FoD Functions' then sub-option #4 to 'Install FoD Keys', proceed to step 5.
4. Select BLUE MENU option #3 'Backup and Restore All System Settings' then sub-option #3 for 'Restore' the planar configuration from the USB key. This will include restoring FoD key files that should already exist on the USB Key in the root directory from the steps above. Depending on the machine involved, restarting the IMM (or rebooting the machine) may be required for the FoD to activate successfully.
5. Any issues with FoD activation should be directed to SSR Technical Support (in the USA, 1-800-426-2472) using the SWG Appliance machine type and System x sub-menu option (if needed).