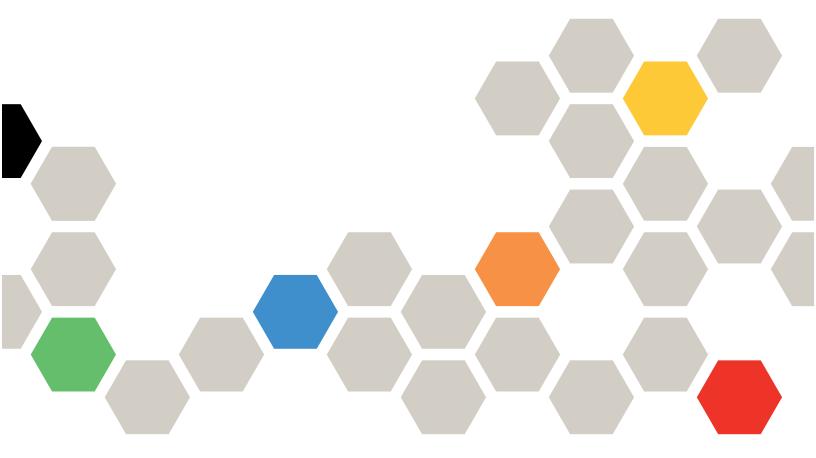# Lenovo ThinkAgile SXM Series Planning and Setup Guide

Notices

Note

Before using this information and the product it supports, be sure to read and understand the safety information and the safety instructions, which are available at the following address:

https://pubs.lenovo.com/safety_documentation/pdf_files

In addition, be sure that you are familiar with the terms and conditions of the Lenovo warranty for your solution, which can be found at the following address:

http://datacentersupport.lenovo.com/warrantylookup

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Chapter 1. Planning and Setup considerations

The following considerations and limitations apply to all ThinkAgile SXM Series solutions.

Limitation on automated service requests (Call Home)

Because ThinkAgile SXM Series solutions are serviced and supported at the rack level, it is recommended that you not activate Call Home functionality for the components. If you choose to activate Call Home, be aware that your product entitlement might not be recognized.

Firmware and "Best Recipe" adherence

Lenovo publishes ThinkAgile SXM Series firmware "Best Recipes", which identify the supported firmware levels for the various components. See Chapter 2 "Firmware maintenance and Best Recipe" on page 3 for more details.

ThinkAgile SXM Series entitlement

For ThinkAgile SXM Series solutions that are shipped in a rack, the entire solution is entitled at the rack level, based on the rack Machine Type and serial number. For ThinkAgile SXM Series solutions that are integrated into a customer-supplied rack, the solution is also entitled at the rack level, based on Machine Type and a derived "virtual rack serial number" that is created for each customer order. The following table shows the rack Machine Types that are used for entitlement in all ThinkAgile SXM Series solutions.

Solution	Rack	Rack Machine Type
SXM4200	Lenovo 25U or 42U	9565
SXM4200	Customer provided	7Y34
SXM6200	Lenovo 42U	9565
SXM4400	Lenovo 25U or 42U	9565
SXM4400	Customer provided	7Y34
SXM6400	Lenovo 42U	9565
SXM4600	Lenovo 42U	7DDE
SXM4600	Customer provided	7DDF

If you need support for these solutions or any of their components or included software, be sure to use your rack Machine Type and serial number. If you use an individual component (server or switch) serial number, ThinkAgile Advantage Support might not immediately recognize the correct entitlement, which could delay proper case handling.

For scale unit nodes that are added after the original deployment (i.e. expansion nodes), support entitlement is based on the individual component (server or switch) serial numbers.

Chapter 2. Firmware maintenance and Best Recipe

ThinkAgile SXM Series solutions use a "Best Recipe" to identify the supported firmware levels for the product.

For information about ThinkAgile SXM Series Best Recipes, refer to the following Web site:

https://datacentersupport.lenovo.com/solutions/ht505122

Adherence to Best Recipe and Support impact

The ThinkAgile SXM Series Best Recipes include component firmware levels that have been tested in an appropriate environment. Any specific firmware that is above or below the level indicated in the Best Recipe is not supported and might impact Lenovo's ability to support any issues with the relevant component or the entire solution.

Updating firmware

See https://pubs.lenovo.com/thinkagile-sxm/printable_doc for links to relevant documentation.

Chapter 3. Overview of planning and deployment activities

ThinkAgile SXM Series solutions are intended to be installed and set up in your data center by Lenovo Professional Services. Review the following information to ensure that you are properly prepared for the installation and configuration engagement.

Predeployment planning and preparation

Lenovo Professional Services will work with you to confirm the onsite engagement and the necessary prework. If the necessary predeployment activities are not completed properly, the deployment engagement will be delayed. See Chapter 4 "Predeployment requirements" on page 7 for more details.

Deployment engagement overview

See Chapter 5 "Deployment activities" on page 9 for the high-level activities that Lenovo Professional Services will perform.

Chapter 4. Predeployment requirements

Lenovo Professional Services will advise you of the necessary planning and prework that needs to occur before the onsite engagement.

The following activities are the responsibility of the customer:

- Unboxing the rack.
- Placing the rack in the data center.
- Connecting power to the rack.
- Connecting the rack to the customer's network.
- Performing a green light check, to ensure that hardware is operational prior to the onsite deployment engagement.
- Determining the needed implementation architecture, including the connections to the data center network.

Lenovo offers additional predeployment services for ThinkAgile SXM Series solutions, such as Inside Delivery and Hardware Installation.

Microsoft Azure Stack Hub subscription and billing

A Microsoft Azure Stack Hub subscription should be obtained by the customer prior to the deployment engagement. Lenovo Professional Services will review the requirements in the pre-deployment engagement.

For links to information about Microsoft Azure Stack Hub subscriptions and services (such as billing), see https://pubs.lenovo.com/thinkagile-sxm/printable_doc .

Chapter 5. Deployment activities

Lenovo Professional Services will perform a specific set of activities to help ensure proper deployment of ThinkAgile SXM Series solutions. Additional predeployment services are available.

Note: The success of the onsite engagement is dependent on correct planning and prework. See Chapter 4 "Predeployment requirements" on page 7 for more details.

The onsite installation and configuration activities that Lenovo Professional Services will perform include the following:

- Review the deployment worksheet that was completed during the predeployment engagement.
- Verify that the customer network is ready.
- Verify the as-shipped product configuration.
- Connect the TOR switches to the customer network.
- Perform basic network configuration to integrate the ThinkAgile SXM Series rack into the customer environment.
- Set up Lenovo XClarity Administrator management of the product.
- Verify and update the solution to the appropriate ThinkAgile SXM Series Best Recipe firmware profile.
- Create credentials for BMC access.
- Deploy Azure Stack Hub.
- Register the ThinkAgile SXM Series solution with Microsoft Azure.
- Verify the product environment, to ensure a successful handover.
- Provide a skill transfer to the customer. This includes basic operational tasks and Support processes.

Lenovo Professional Services will provide information about the final configured solution.

The following items are not in the scope of the initial ThinkAgile SXM Series deployment engagement. Many of these can be handled via other available Professional Services offerings.

- Installation or configuration of server applications.
- Complete administrative or operations training.
- Data migration from existing storage systems.
- Installation assistance for nonstandard hardware components or components not purchased from Lenovo. Note that this activity can affect the support for the product.

Chapter 6. License considerations

Some software licenses are provided with ThinkAgile SXM Series solutions; they must be accepted by the customer.

Note: Some license agreements might be accepted on the customer's behalf by Lenovo Manufacturing during the installation and provisioning processes. When required, license agreements will be shipped hardcopy or softcopy with the product.

All ThinkAgile SXM Series solutions include a Lenovo XClarity Administrator Pro license for proper management of the scale unit nodes. The license key file must be provided by the customer to the Lenovo Professional Services engineer at the time of deployment.

Additional licenses might be available for purchase during the ThinkAgile SXM Series ordering process.

Microsoft Azure Stack Hub subscription and billing

A Microsoft Azure Stack Hub subscription should be obtained by the customer prior to the deployment engagement. Lenovo Professional Services will review the requirements in the predeployment engagement.

For links to information about Microsoft Azure Stack Hub subscriptions and services (such as billing), see https://pubs.lenovo.com/thinkagile-sxm/printable_doc .

Chapter 7. Management considerations

Day-to-day management of the Lenovo ThinkAgile SXM Series solutions and components can be accomplished through multiple interfaces.

Lenovo XClarity Administrator

Lenovo XClarity Administrator is a centralized resource management solution that simplifies infrastructure management, speeds responses, and enhances the availability of server systems.

The LXCA browser interface is used to manage hardware health, as well as to perform automated firmware updates via Azure Stack Hub patch and update (PnU) functionality.

Microsoft Azure Stack Hub

Microsoft Azure Stack Hub provides both Administrator and Tenant portals for management of resources and tasks. For information about using the Microsoft Azure Stack Hub management capabilities, see https:// pubs.lenovo.com/thinkagile-sxm/printable_doc for relevant links.

Switch management

Lenovo network switches can be managed by LXCA, including hardware monitoring, switch configuration backup, and switch firmware updating.

Basic management functionality for Mellanox switches supported by LXCA at this time

Chapter 8. Managing IDs and passwords

Proper maintenance of IDs and passwords is essential for the security of the components and the overall product. Lenovo's Software Security Review Board stresses in the strongest possible terms that customers should manage all product credentials according to the recommendations stated here.

Initial IDs and passwords

Applicable IDs and passwords will be set or changed during the Lenovo Professional Services deployment engagement. Lenovo Professional Services will provide a list of all credentials used to deploy and manage the ThinkAgile SXM Series solution in the documentation that is provided to the customer during the solution handover. Lenovo Professional Services will provide a list of all credentials used to deploy and manage the ThinkAgile SXM Series solution in the documentation that is provided to the customer during the solution handover.

Changing passwords

For password change procedures, refer to the relevant component documentation. See https://pubs.lenovo.com/thinkagile-sxm/printable_doc . In particular, the following Microsoft web page provides an overview and gives detailed instructions for rotating secrets in the Azure Stack Hub environment:

https://docs.microsoft.com/en-us/azure-stack/operator/azure-stack-rotate-secrets

Important: Changing some IDs or passwords without proper planning (for example, the IMM/XCC credentials on any of the scale unit nodes) can affect the overall configuration of the solution and could result in the inability to manage the nodes via XClarity Administrator.

Password criteria

The following password criteria are strongly recommended by Lenovo's Software Security Review Board:

- No less than twenty (20) characters.
- Includes letters, specifically mixed case.
- Includes numbers.
- Includes punctuation.
- Does not include any repeated characters.

It is also recommended that a random password generator be used. One example is the Norton Identity Safe Password Generator. See the following Web site:

https://identitysafe.norton.com/password-generator