What is SUSE Manager?
SUSE Manager is a best-in-class open source infrastructure management solution for your software-defined infrastructure. It is designed to help your enterprise DevOps and IT Operations teams to reduce complexity and regain control of IT and IoT assets, increase efficiency while meeting security policies and optimize operations with automation to reduce costs.

What is SUSE Manager 4?
SUSE Manager 4, the latest release from SUSE, further delivers a best-in-class open source infrastructure management solution that lowers costs, enhances availability and reduces complexity.

As a key component of a software-defined infrastructure, SUSE Manager 4 enables our customers to:

Lower costs and simplify management with enhanced content lifecycle management, making it easier to move and manage packages throughout the DevOps cycle and virtual machine management—enabling near real-time management of hundreds of servers
- Simplify management and reduce operational expenditure with enhanced package staging through a new Content Lifecycle Management (CLM) user interface and improved APIs for managing packages, patches and configurations. Moving packages across multiple stages, such as development, QA and production, is now a simple UI-based task.
- Ease virtual machine management complexity with new Salt-based virtual machine management that enables the near real-time management of hundreds of servers. This allows for managing virtual machines through a UI (with start/stop buttons) and defining Salt states. For example, you can create a Salt state that ensures that the same three virtual machines are created and running on all your retail branch servers!

Note: This functionality is a paid-for add-on subscription.

Increase availability and visibility with expanded monitoring and alerting capabilities that enable you to easily identify and resolve issues
Gain better infrastructure insights and reduce downtime with the ability to provision, configure and automate a reliable and easy to use monitoring and alerting infrastructure built on the next generation Prometheus based monitoring stack. With a single tool, you can now not only deploy, configure and manage your Linux infrastructure, but also monitor the health of that infrastructure.

Note: This functionality is a paid-for add-on subscription per managed system.

Reduce complexity and regain control with expanded OS support and new SAP HANA deployment capabilities, making easier than ever to implement install, configure and patch SAP HANA
- Regain control of complex heterogeneous IT environments with extended target OS support that now includes openSUSE and Ubuntu client management and simplified deployments via a unified installer.
- Reduce complexity with our new “Formulas with Forms” capabilities for SAP, which allow for the easy setup of SAP HANA nodes and HA cluster configuration (technology preview)—making it easier than ever to implement SAP’s best practices for installing SAP HANA on SUSE Linux Enterprise.
- Simplify operations with an improved content staging UI and APIs that enable SAP customers to easily build patch staging environments for their Linux updates that mirror their SAP infrastructure, without the need for custom scripting.

Is a reinstall required to move to SUSE Manager 4?
Yes. SUSE Manager 4 is a major release based on SUSE Linux Enterprise 15 Service Pack 1 and needs to be installed from scratch. As part of the installation process, you can seamlessly sync your existing data from the SUSE Manager 3.2 server. Your
managed systems don’t require any change. Migrating from older versions of SUSE Manager is not supported.

What are the components of the SUSE Manager solution?
SUSE Manager is made up of two main components.

SUSE Manager Server: SUSE Manager server provides the web-based user interface and connection to SUSE Customer Center. It can be installed with the unified installer for SUSE Linux Enterprise 15 Service Pack 1. SUSE Manager Server captures and maintains server data and provides comprehensive lifecycle management functionality via the user interface and a rich API for automation. You deploy SUSE Manager Server behind your company firewall. SUSE Manager Server subscriptions are available:
- For environments with up to 50 managed instances
- For environments with more than 50 managed instances

SUSE Manager Proxy Server: The proxy server lowers bandwidth needs and provides faster local updates for environments with more than 300 servers or deployments across dispersed geographical locations.

Additionally, for managed systems, we provide a lifecycle management subscription. This subscription delivers functionality for updating servers. It also includes advanced server management capabilities that increase your Linux environment’s scalability and enhance your IT staff’s productivity. It enables you to deploy, configure and redeploy Linux systems from a single, centralized console.

A SUSE Manager installation consists of at least one SUSE Manager Server and the SUSE Manager Lifecycle Management entitlement for each managed system that has an active SUSE Linux Enterprise subscription.

For all systems that you want to monitor with Prometheus, you can add Monitoring entitlements (not yet available for Ubuntu and Red Hat Enterprise Linux).

What is the key functionality?
SUSE Manager provides complete control and visibility into your IT resources and lifecycles, from asset management to redeployment. Through its automated and effective management, SUSE Manager keeps your data center secure and compliant.

Key SUSE Manager functionality includes:

- Automation—automate Linux server provisioning, configuration and patching for faster, consistent and repeatable server deployments.
- Asset Management—inventory your systems and use unattended bare-metal provisioning.
- Provisioning—streamline your operating system (OS) provisioning (bare-metal and VM).
- Software Package Management—customize your package management and enable integration with third-party management tools.
- Patch Management—automate your updates and patches.
- Real-time Orchestration and Configuration Management—leverage Salt as part of SUSE Manager for collecting system status for installed packages and config files. “State files” enable you to hierarchically describe the configuration of your systems and automate and orchestrate your container and cloud VM deployments. IT Admins can easily deploy and parameterize salt formulas via standardized forms in the SUSE Manager UI.
- Manage IoT—manage and maintain your Raspberry Pi-based IoT devices.
- Ease virtual machine management complexity—with Salt-based virtual machine management that allows for the near real-time management of hundreds of servers (paid-for add-on subscription).
Gain better infrastructure health insights and reduce downtime—with the ability to provision, configure and automate a reliable and easy-to-use monitoring and alerting infrastructure built on the next-generation Prometheus based monitoring stack servers (paid-for add-on subscription).

Manage large, complex deployments—manage complexity with the extended capabilities in our easy-to-use forms-based UI.

Redeployment—re-deploy on the same hardware, with no physical interaction needed.

Compliance and Security—identify security vulnerabilities and keep your systems compliant.

Reduce bandwidth costs and minimize resources—lower costs and simplify deployment while easily scaling larger environments for Public Cloud and Kubernetes infrastructures.

What are the benefits of using SUSE Manager?
SUSE Manager helps your enterprise DevOps and IT operations teams to:

**Optimize operations while reducing costs** with automated Linux server and IoT device provisioning, patching and configuration for faster, consistent and repeatable server deployments.

- Easily manage and optimize usage of your SUSE subscriptions, helping to ensure that you aren’t buying subscriptions you don’t need.

- Improve onboarding efficiency of new hardware with automated discovery (via PXE boot).

- Optimize operations by enabling IT to quickly build container images based on their SUSE Manager repositories.

- Increase operational efficiency and support CI/CD with a single tool (using Salt) for automated deployment of hardened OS templates (bare metal, VMs or containers) to tens of thousands of servers and IoT devices for faster, consistent and repeatable provisioning and configuration, without compromising speed or security.

- Reduce costs with automated patch management enabling you to deploy patches based on software channel assigned to ensure systems are kept up to date.

**Reduce complexity and regain control of IT assets** with a single tool to manage Linux systems across a variety of hardware architectures and hypervisors, as well as container, IoT and cloud platforms.

- Reduce complexity with a single tool that enables you to easily onboard and manage any Linux server connected to the network, from edge devices to your Kubernetes environment, no matter where it is located—in your data center, a third-party data center or in the cloud.

- Improve visibility of your infrastructure—with improved graphical visualization of your IT systems status and their relationships. Once an asset has been on-boarded, you will never “lose” it. So, if it goes offline or stops responding, you will know. Quickly view your Linux assets and identify assets that need attention.

- Simplify management and regain control of your IT assets with a graphical visualization of your IT systems and their relationships, as well as the capability to organize Linux servers into logical groupings—group them, tag them with additional details (location in the data center, rack, etc.).

  - Locate and store hardware specifics for the servers and IoT devices, enabling grouping/tagging by hardware characteristics (vendor tags, CPU architecture, RAM).

**Ensure compliance with internal security policies and external regulations** with automated monitoring, tracking, auditing and reporting of your systems/devices, VMs and containers across your development, test and production environments.

- Comprehensive monitoring solution that enables operations to monitor your Linux environments from the HW through the OS layer, up to their applications.

- Detailed compliance auditing and reporting with the ability to track all hardware and software changes made to your managed Linux infrastructure.
Easily track system compliance with automated patch management that ensures daily notifications of systems not compliant with the current patch level.

Faster non-compliant remediation with the ability to quickly identify systems deployed in hybrid cloud and container infrastructures that are out of compliance with hardened profiles/templates, based on your own internal security policies.

Why should I choose SUSE Manager over other options?
When you choose SUSE Manager, you get the most advanced systems management solution for enterprise Linux environments. You also get:

- The only systems management solution tightly integrated with SUSE Linux Enterprise Server: Unlike other Linux management solutions, SUSE Manager is tightly integrated with SUSE Linux Enterprise Server, ensuring consistent management across systems by exposing functionality that behaves exactly the same on the managed server and the management console. SUSE Manager enables you to effectively manage SUSE Linux Enterprise Server and all product extensions across physical, virtual and cloud deployments. SUSE Manager also manages SUSE Linux Enterprise Server-based appliances and SUSE Linux Enterprise Server for System z.

- The most efficient solution for managing Linux environments: SUSE Manager delivers best-in-class Linux server management capabilities enhanced by the inclusion of unique SUSE Linux Enterprise capabilities. SUSE Manager eases initial setup for new servers with AutoYaST to reduce your deployment time and effort.

- The ability to manage SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Ubuntu LTS and openSUSE. SUSE Manager is the only Linux server management solution built to manage both SUSE Linux Enterprise Server and Red Hat Enterprise Linux. SUSE Manager maintains compatibility with Spacewalk and provides a similar feature set and user experience to those available with Red Hat Network Satellite. In combination with SUSE Linux Enterprise Server with Expanded Support, SUSE Manager delivers the same management capabilities for Red Hat Enterprise Linux as it does for SUSE Linux Enterprise Server, while offering a simple and straightforward migration from Red Hat Network Satellite.

What is Salt?
Salt is an increasingly popular execution, orchestration and configuration management framework that is easy to extend. Salt provides a very scalable, fast and secure way to efficiently collect system status information about installed packages and configuration files in real time for all your systems.

It enables you to deploy tens of thousands of systems without compromising speed or security. With real-time configuration and monitoring, the time to patch hundreds or even thousands of servers in large environments is significantly reduced. Salt can also automate and orchestrate cloud deployments and Docker containers.


How do you deploy SUSE Manager, and what are the system requirements?
SUSE provides SUSE Manager Server and Proxy as online repositories for easy installation with the unified installer for SUSE Linux Enterprise 15 SP1.

SUSE Manager comes with a built-in PostgreSQL database.

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<thead>
<tr>
<th>Hardware</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>CPU</td>
<td>Multi-core 64-bit CPU (x86_64)</td>
</tr>
<tr>
<td>RAM</td>
<td>Minimum 4 GB+ for test server</td>
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<tr>
<td></td>
<td>Minimum 16 GB+ for base installation</td>
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<tr>
<td></td>
<td>Minimum 32 GB+ for a production server</td>
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<tr>
<td>Disk Space</td>
<td>Minimum 100 GB for root partition</td>
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<tr>
<td></td>
<td>Minimum 50 GB for /var/lib/pgsql</td>
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<tr>
<td></td>
<td>Minimum 50 GB per SUSE product + 100 GB per Red Hat product /var/spacewalk</td>
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</table>
Where can I purchase SUSE Manager?
- You can purchase SUSE Manager directly from SUSE or from one of our partners, resellers or solution providers.

- To buy directly from SUSE, please visit: www.suse.com/products/suse-manager/how-to-buy/

- To buy via a reseller or solution provider, please search: https://www.suse.com/partners/find-partner/

Where do I get more information about SUSE Manager and other SUSE Enterprise Linux Server products?
- For more information about SUSE Manager, visit: www.suse.com/products/suse-manager/

- For more information about SUSE Linux Enterprise Server, visit: www.suse.com/products/server/

- For more information about SUSE Linux Enterprise Server with Expanded Support, visit: www.suse.com/products/expandedsupport/