## KEY BENEFITS

- Creation and management of VMs for compute and storage.

- OS delivery to bare metal nodes via the DSP.

- Virtual machine or container environment with virtualized storage through the Cloud Platform Bundle.

- **Elasticity:** Ability to scale infrastructure according to changing needs.

- **Automation:** Assistance from Drut's technical team in adopting open-source software.

- **White Glove Service:** A fully managed on-prem cloud with tools for IT staff.

## Overview

The **Drut Software Platform (DSP)** is a comprehensive on-prem private cloud infrastructure and platform as a service solution enabling cloudlike services and automation for end users. It comprises a multilayered collection of open-source software services designed to create a standards-based environment for next-generation cloud services. Drut offers this software stack as three independent software bundles as part of a managed service, allowing you to build a private cloud infrastructure tailored to your needs without vendor and managed service lock-in.

## DSP Capabilities and Benefits:

The DSP provides on-prem cloud-like infrastructure management, allowing for easy reconfiguration, rebalancing, and redeployment. It replicates the benefits of a public cloud within your private data center, ensuring fluid resources at multiple layers, from hardware to software stack. The DSP can function independently of Drut's photonic fabric, though the photonic fabric can be added later if desired.

## Key features of the DSP include:

- On-prem private cloud deployment, suitable for colo or onsite data centers.
- Data-driven environment to optimize CAPEX and OPEX through data gathering and correlation capabilities.
- Infrastructure management network operation.
- Bare metal private cloud construction.
- Server OS loading and deployment of various software stacks, including K8s clusters, virtualization stacks, operating systems, and applications of choice.

## Supported Capabilities:

- Drut Software Platform (DSP): Enterprise-focused suite of open-source software stacks and services for on-prem cloudlike environments, deployable as IaaS for private clouds.
- Drut Metal as a Service (MaaS): Self-service, remote installation of operating systems on real servers, transforming your data center into a bare metal cloud.
- OpenStack: Cloud infrastructure for VMs, bare metal, containers, with Ceph support.
- Juju Framework: Application and infrastructure deployment, integration, and operation across substrates like Kubernetes, VMs, or bare metal on private clouds.
- Kubernetes (K8S): Production grade container orchestration.
- Ceph: Virtual and distributed storage for VMs and containers.

The DSP can be purchased a la carte or as bundles per node, with options for lifetime RTU and one- or three-year support and managed service agreements. Support and platform enhancements are available through an annual support agreement, and the right to use can be converted into a DIY service for full ownership of your private cloud. For the latest bundle offerings, contact Drut.

## Ordering Information:

- The DSP can be purchased directly from Drut or with new infrastructure hardware from partners.
- It is offered as a set of software packages requiring installation and managed services from Drut.
- Service migration for Ceph, K8s, and OpenStack is available with a one-time setup, configuration, and migration fee. Postmigration, the system is handed over to IT staff for operational use, while Drut manages it.
- Drut provides technical support for DevOps and the deployment of new services.

## Installation and Managed Services:

The installation service includes installing and configuring DSP-supported packages, migrating existing workloads and storage, and connecting to the existing core infrastructure. Once complete, IT staff training is provided for self-managing virtual machine and container infrastructure. The managed service includes proactive monitoring of all infrastructure services, bug fixes, and software upgrades per the maintenance agreement, and daily dashboard reports. Adding workloads does not increase the annual cost, as the linear cost model means you own and can update the hardware, with DSP costs directly correlated with the number of nodes.

Drut can be contacted for assistance with deploying new open-source packages or supporting new services, committed to supporting your open-source journey on your hardware. After a year or two, you can take over the infrastructure and operate it yourself.

1. Product Overview
   a. Version: Current version number.
   b. Release Date: Date of the latest release.
2. Technical Specifications
   a. Supported Languages: Programming languages and frameworks supported.
   b. Databases: Supported database types and versions.
   c. : Middleware options and integrations.
   d. Development Tools: Integrated development environments (IDEs), debugging,and monitoring tools.
   e. APIs: Available APIs and their documentation.
   f. Containers and Orchestration: Support for containers (e.g., Docker) and orchestration tools (e.g., Kubernetes)

3. System Requirements
    a. Client Requirements: Requirements for development machines (OS, browsers).
    b. Server Requirements: Specifications for any on premises components, if applicable.
4. Performance Metrics
    a. Scalability: Information on how the platform scales with increasing workload.
    b. Latency: Expected latency and performance metrics.
    c. Uptime: Service level agreement (SLA) for uptime and reliability.
5. Security Features
    a. Authentication and Authorization: Methods supported (e.g., OAuth, SAML).
    b. Data Encryption: Encryption standards for data at rest and in transit.
    c. Compliance: Compliance with industry standards and regulations (e.g., GDPR, HIPAA).
6. Deployment and Management
    a. Deployment Options: Supported deployment models (public cloud, private cloud, hybrid).
    b. Management Tools: Tools available for managing and monitoring applications.
    c. Backup and Recovery: Backup options and disaster recovery plans.
7. Integration and Interoperability
    a. ThirdParty Integrations: Supported thirdparty tools and services.
    b. Interoperability: Information on how the PaaS integrates with existing systems.
8. Support and Maintenance
    a. Support Options: Available support channels (email, phone, chat).
    b. Maintenance Plans: Information on maintenance plans, if any.
    c. Updates: Policy on platform updates and upgrades.
9. Compliance and Certifications
    a. Certifications: Industry certifications (e.g., ISO, SOC 2).
    b. Compliance Standards: Adherence to standards (e.g., PCI DSS).

Additional Resources: Links to user manuals, FAQs, and other resources. (TBD)