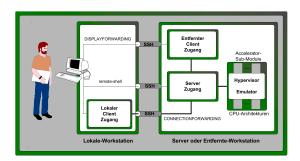
UnifiedSessionsManager

Virtualisation and Cloud Computing for Network and Systems Administration

Virtual Machines, Clouds, and Grids

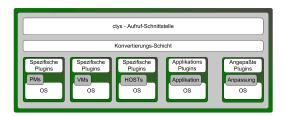
The UnifiedSessionsManager is focussing on the integration and standardization of heterogeneous IT applications comprehensing various physical and virtual systems. Therefore a neatless user and administrations interface including management facilities are provided. Thus a distinction between desktop, client, and server virtualization, or physical machines is no longer required.



The open source product UnifiedSessionsManager provides a versatile toolset for the simplified application and administration of a heteregenous set of distributed resources of complex system environments. The scope of application ranges from a single-user system up to distributed data centers.

Application and Extendibility

The main areas of application are systems admininistration, server operations, software development and test automation, where the UnifiedSessionsManager serves as an integration framework for standard components by an flexible and extendable plugin structure.



The vendor independent addressing concept including name services and the automation facility by macros and scripting interfaces provides for simplified application. The runtime environment is accomplished by utilities for installation, distribution, and configuration, secured by the underlying OpenSSH encryption for secure applications.

Application Examples

Systemadministration up to the Datacenter

Particular advances for the systemadministrator are the automatic creation of the inventory database and the easily applicable administration of huge amounts of virtual machines. The facilities for import and export e.g. by XML interfaces, which provide the simplified integration with additional systems for management, short, and longterm analysis. The support of addressing monitor arrays by Xinerama in combination with an extended addressing schema enables a carefree and dynamic workflow with multiple concurrent server sessions. The administration of servers is particularly supported by the remote-start feature for arbitrary applications. This is complemented by the provided GROUP objects and MACROs for automation. The security challenges for local and remote networks are answered by the utilisation of OpenSSH only for simplified application of reliable security measures. This also includes the apllication of encryption to graphical desktop sessions.

Energy-Efficiency

In data center applications the WoL and IPMI(under dev.) features are provided for energy reduction and dynamic loadbalancing. This is particularly provided by the fully automated boot of pre-required pyhsical machines for requested VMs.

Software-Archiving

Virtual machines could be managed easily by dynamic definition of views for handling of task specific subsets. This provides e.g. forensic facilities for security issues or temporary deactivation of sets of VMs in large environments.

Advanced Addressing

The advanced addressing facility with dynamic runtimeresolution of namebinding information could be utilized for flexible addressing as well as the persistent storage within MACROs for specific instances. Another advance is here the neatless addressing of VMs and PMs with a common schema comprising all supported session types. Thus in addition of the user defined LABEL it is e.g. possible to use the TCP/IP address, the MAC address, or the UUID for each supported VM.

UnifiedSessionsManager

Virtualisation and Cloud Computing for Network and Systems Administration

Technical Data

Supported Host-Operating Systems 1.)

<u>Linux</u>®: CentOS, Debian, Fedora, Mandriva, ScientificLinux, SuSE, OpenSUSE, Ubuntu

<u>BSD</u>®: FreeBSD, OpenBSD <u>SUN</u>®: OpenSolaris, Solaris

Suppoted Hypervisors 1.)

KVM®, QEMU®, VirtualBox®, VMware®(Player/Server/Workstation), XEN®

Supported Guest-Operating systems 1.)

<u>Linux</u>®: CentOS, Debian, Fedora, Mandriva, ScientificLinux, SuSE, OpenSUSE, Ubuntu

<u>BSD</u>®: FreeBSD, OpenBSD <u>SUN</u>®: OpenSolaris, Solaris

Microsoft®: Windows®:NT, 2000, XP, 200x, DOS

FreeDOS: Balder

Supported Client-Operating systems 1.)

<u>Linux</u>®: CentOS, Debian, Fedora, Mandriva, ScientificLinux, SuSE, OpenSUSE, Ubuntu

<u>BSD</u>®: FreeBSD, OpenBSD <u>SUN</u>®: OpenSolaris, Solaris

Supported Graphical User Interfaces 1.)

X11: Gnome, KDE, fvwm, xfce

Supported Consoles

CLI, XTerm, gnome-terminal, Emacs, RDP, VNC, VMware, VMWRC

Install Pakages

Current supported formats are tgz(for all supported platforms) and rpm(CentOS and additional).

Announcements

- •OpenVZ, Unbreakable Linux®.
- CUDA-Integration with GPGPU management.
- Management of database servers.
- •Testautomation with DejaGNU, Expect, and Tcl/Tk.
- •LDAP based directory services/MIB.
- Nagios integration.

Licenses

BASE-Pakage:

•GPL3 Software

•FDL-1.3 - with invariant sections
Basic-Documentation, see Releasenotes.

DOC-Pakage:

• CCL-3.0 - NO-DERIV + NO-COMMERCIAL Extended documentation including the depicted concepts, processes and interfaces. Commercial - non exclusive - extensions are available.

Development

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- •IEEE
- •FSF
- •Gl
- ·LinuxVerband e.V.
- VDE

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Sales

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