

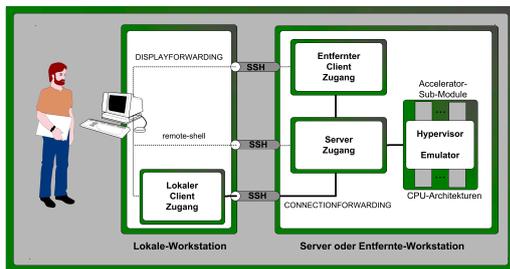
UnifiedSessionsManager

Virtualisation and Cloud Computing for R&D and Test

Virtualization in R&D and Test

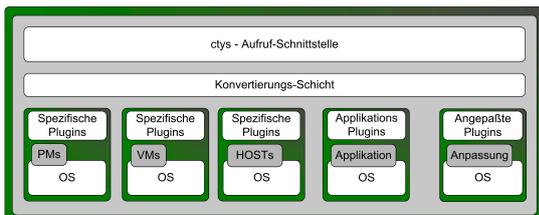
The UnifiedSessionsManager provides several unique features for software development and test, targeted particularly for the support of developers. These comprise a neat user interface including automation facilities for individual development environments with support of distributed client and server solutions. Additionally the automated creation, registration, inventory management, and versioning of personal environments and testees is supported by the contained toolset.

The work environment for developer and tester contains particularly various features for dynamic configuration of individual desktops. Therefore the function set of X11 based desktops - X11, Gnome, KDE, fvwm, xfce, etc. - is extended by means for persistent preconfiguration of comprehensive workspaces assembled by distributed systems and components.



The support for persistent storage of desktop configurations for distributed components enables the quick startup of arbitrary workspaces. This also provides for simplified regression tests. The applicability to any 3rd-party application enables the integration into mixed-runtime sets.

These unique feature set provides particularly for the development and test of distributed systems in an easily applicable smart development and test environment.



Finally the design based on a modular and extendable framework offers the possibility of adaptations and extensions by individual plugins.

Application Examples

Software Development and Test

The particular advances for the software development and test are based on the capabilities of the user interface, the automated inventory collection, and the simplified creation of virtual machines and contained guest OSs.

Modular and Dynamic Configuration of Desktops

The call-interface driven control of custom desktop entities for VNC based remote desktops provides for task specific configurations of runtime environments. This feature is simply based on the provisioning of the standard xstartup file by user specific standard shell coding. Arbitrary executables could be provisioned into the xstartup file, including ctys calls with the full scope of addressing. In addition the dynamic redirection of DISPLAY output is provided by the '-D' option for any plugin based on an X11 output. This enables the persistent LABEL as a valid target address for addressing of arbitrarily dynamic display-IDs. E.g. a KVM instance could be started and the attached console could be post-attached to an already running VNC desktop, by usage of LABELs only.

Development and Test Environments

The provisioning of runtime environments with consistent component versions is particularly supported for major projects. This is implemented by the easy-to-use automated creation and inventory collections of virtual machines, allowing to set up several databases with various sets - so called individual Views. This feature is completed by the specialized nameservice for virtual machines based on this central databases for inherent data consistency. The usage of data sets as views e.g. task and project specific sets could be utilized easily by each project member without the requirement of additional administration. The utilized file database is compatible to any spreadsheet program.

The scalability provides for application by single-member projects as well as for major projects with several hundred distributed members.

UnifiedSessionsManager

Virtualisation and Cloud Computing for R&D and Test

Technical Data

Supported Host-Operating Systems 1.)

Linux®: CentOS, Debian, Fedora, Mandriva, ScientificLinux, SuSE, OpenSUSE, Ubuntu

BSD®: FreeBSD, OpenBSD

SUN®: OpenSolaris, Solaris

Supported Hypervisors 1.)

KVM® , QEMU® , VirtualBox® ,

VMware® (Player/Server/Workstation), XEN®

Supported Guest-Operating systems 1.)

Linux®: CentOS, Debian, Fedora, Mandriva, ScientificLinux, SuSE, OpenSUSE, Ubuntu

BSD®: FreeBSD, OpenBSD

SUN®: OpenSolaris, Solaris

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

FreeDOS: Balder

Supported Client-Operating systems 1.)

Linux®: CentOS, Debian, Fedora, Mandriva, ScientificLinux, SuSE, OpenSUSE, Ubuntu

BSD®: FreeBSD, OpenBSD

SUN®: OpenSolaris, Solaris

Supported Graphical User Interfaces 1.)

X11: Gnome, KDE, fvwm, xfce

Supported Consoles

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

VMware, VMWRC

Install Packages

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

Announcements

- OpenVZ, Unbreakable Linux®
- Emulation of Embedded Environments with QEMU®.
- CUDA-Integration with GPGPU management.
- Management of Database Servers.
- Testautomation with DejaGNU, Expect and Tcl/Tk
- Integration of Eclipse Emacs.
- Functionality as evaluation and training system.

1.) Partly limited functionality, for details refer to Releasenotes.

Licenses

BASE-Package:

- GPL3 Software
- FDL-1.3 - with invariant sections Basic-Documentation, see Releasenotes.

DOC-Package:

- 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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Membership:

- IEEE
- FSF
- GI
- LinuxVerband e.V.
- VDE

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Sales

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