Datasheet
FUJITSU Software UForge AppCenter 3.8

Hybrid IT Application Delivery and Migration

Hybrid IT Application Delivery

Hybrid IT adoption continues to grow at a rapid pace. Enterprises are looking to take advantage of the agility benefits of new fast IT environments without sacrificing the governance, control and security they have come to expect from traditional robust IT data centers. Bridging the gap between old and new is the key to headache-free hybrid IT, but that process inevitably presents a number of significant challenges.

One of those challenges is how to repeatably and consistently deploy and manage applications in a hybrid environment. Getting applications up and running where you need them, whether you're using a robust or fast IT platform, without getting overwhelmed by the number of operating systems and infrastructures you need to support, and without losing control of those applications you have running, can quickly turn into a major headache.

To take full advantage of Hybrid IT, enterprises need to automate application release processes to increase business agility and innovation, while ensuring consistent application delivery across platforms.

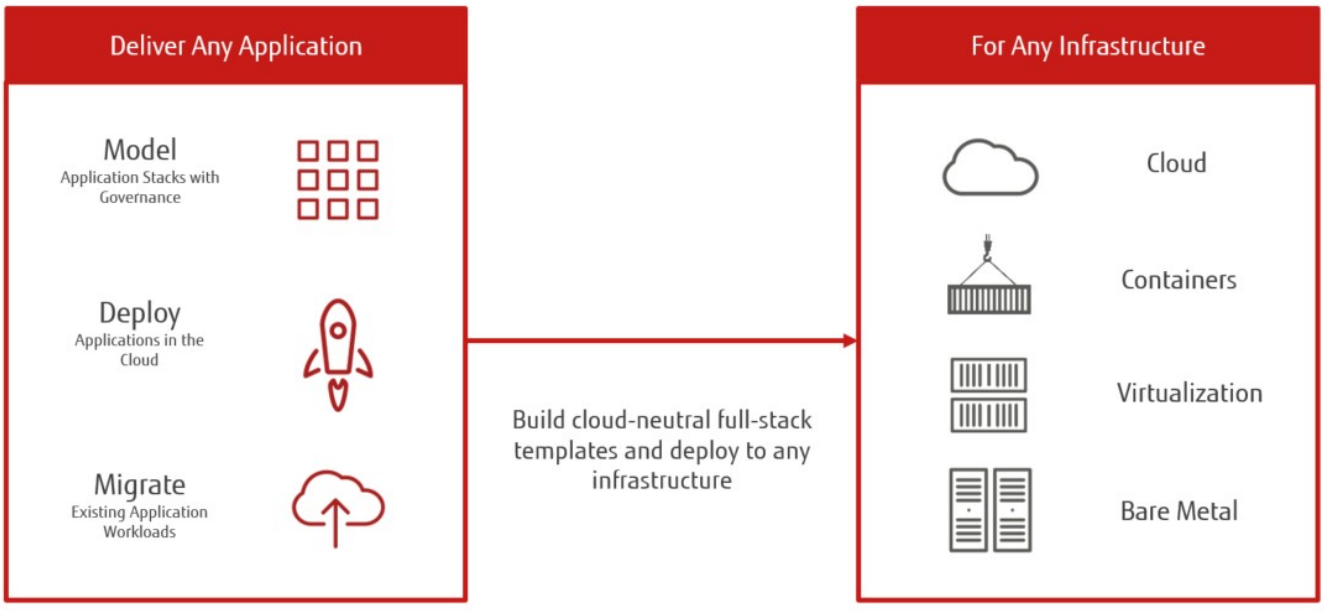
UForge AppCenter

UForge AppCenter enables enterprises to model, deploy and migrate applications for hybrid IT environments, including cloud, container and virtualized infrastructures. It enables you to:

- Deploy applications: model and deploy applications for any cloud
- Automate application release processes: integrate with DevOps tools to provide continuous software delivery
- Migrate applications: audit live workloads and automatically migrate to cloud

UForge AppCenter supports digital transformation letting enterprises benefit from:

- Increased business agility, with the ability to run applications in the "best execution venue", whether that's in the cloud or a traditional data center
- Greater control and enterprise governance over software and applications
- Accelerated release and onboarding cycles to improve time to market for applications and services
- The ability to foster co-creation and innovation by improving teamwork, collaboration and productivity in DevOps organizations



Features and benefits

Main features	Benefits
Application Modeling and Deployment	

■ "Model once, run anywhere" and 100% automation:
  ■ Full-stack templating for Linux and Windows, modeling install profile, OS, middleware, application and configuration logic in a single template
  ■ "One-click" automated machine image build from your template for any cloud, hypervisor or container
  ■ Instant deployment of machine images on supported clouds
■ Enterprise-wide, centrally-administered software catalogs and private catalogs per user
■ Automated dependency checking of all OS packages, with the ability to specify particular package versions
■ Native Linux OS repositories since 2008 updated daily and the ability to integrate with custom enterprise repositories
■ Template cloning with ability to extend and update afterwards
■ "Time machine" to analyze and simulate OS updates and rollbacks
	■ Deliver applications 30x faster across hybrid IT environments with full automation compared to manual re-assembly for each cloud
	■ Ensure immutable, repeatable application deployments across clouds
	■ Avoid lock in to cloud platforms and vendors
	■ Maintain governance and transparency over the full software stack; ensure compliance with corporate-approved components
	■ Easily manage complex software matrices including several operating systems and target environments
	■ Reduce application deployment and configuration errors through automated processes
	■ Easily manage template lifecycles with updates and patches, or the ability to rollback if needed

Application Migration	
■ Live server scanning to analyze and report all the software components making up your workload ■ "Lift and shift" migration for Linux and Windows, simply re-hosting your live server in a new cloud or virtual infrastructure ■ Re-platforming for Linux and Windows applications, modeling your live server as a template for updates, patches or managed services injection before migration ■ Includes data synchronization for Linux workloads to streamline the movement of large data sets ■ Ability to create a Windows golden image from live servers ■ Incremental scans to compare servers and identify changes	■ Save 30% costs with automated migration and templating compared to one-by-one manual migration processes ■ Update and standardize application stacks during migration allowing for improved performance, governance or monitoring in a cloud environment ■ Minimize downtime during migration with faster data synchronization ■ Easily audit servers and check for server drift or potential security issues
Integration with DevOps & Enterprise IT	
■ Integration with your existing DevOps toolchain, from continuous integration tools (Maven, Jenkins etc.) to configuration management platforms (Puppet, Chef, SaltStack, Ansible etc.) ■ Collaboration workspaces for sharing templates across teams, including activity streams with notifications, comments etc. ■ Support for containers, including Docker and registration to Docker Hub ■ Export of templates, integrating with revision control systems such as Git or Apache Subversion ■ Event-driven service to integrate with 3rd-party plug-ins and extend software business logic	■ Add VM and machine image creation and maintenance into your DevOps processes for a single, end-to-end toolchain ■ Improve teamwork, collaboration and productivity across development, QA and operations teams to reduce "silos" and accelerate application release cycles ■ Bring software governance to your DevOps processes ■ Integrate templates into existing version control processes ■ Easily connect with external IT services including support ticketing, bug tracking, CRM and more
Platform Administration	
■ Central administration of corporate-approved software catalogs ■ Global statistics dashboard and logos to track platform usage ■ RBAC to define user profiles and access rights by OS, feature etc. ■ Ability to integrate SSO with your corporate LDAP database ■ Ability to use external identity authority for user authentication and authorization	■ Keep full control over enterprise software IP and governance ■ Easily integrate with existing corporate identity and user policies

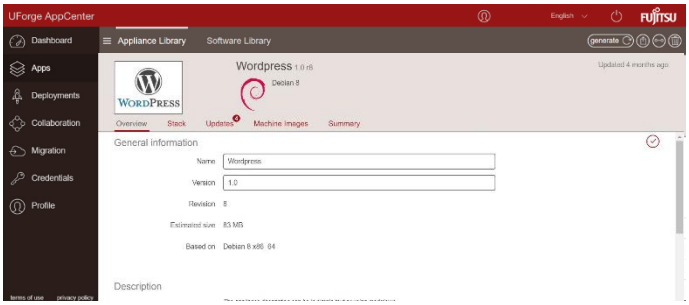
Topic

Cloud-Agnostic Modeling

UForge AppCenter is based on application modeling techniques that are unique to the platform. It models the complete application stack, including operating system packages, middleware, application and configuration logic, as a meta-data template. You can also model disk partitioning, install profile and boot scripts into your template. UForge AppCenter enables you to upload your own proprietary or open source software components or select from a centrally managed catalog.

Modeling provides several benefits for enterprises:

- Easily maintain software governance with complete visibility over the full software stack down to individual OS packages
- Avoid lock in to a specific cloud platform or vendor
- Easily maintain the template life-cycle by simply updating individual software components as necessary
- Ensure your application stack remains consistent wherever you choose to deploy it
- Model from live servers, transforming opaque "black boxes" into transparent systems with the ability to inject life-cycle management



Enterprise DevOps Integration

UForge AppCenter can be easily integrated into your enterprise DevOps toolchain helping automate end to end, from coding, build and test stages to release, deployment and ongoing management. For example, an enterprise might use a CI platform such as Jenkins to create nightly builds, resulting in a software artifact e.g. a war file, tarball or rpm package that has been unit tested. UForge can pick these artifacts up from Jenkins and automatically generate a machine image or container that can then be deployed on the target cloud environment to run more complex testing (for example, integration, security or performance tests). Once the application is ready for release, UForge AppCenter can push it directly to a dedicated on-premise system or other platform for production.

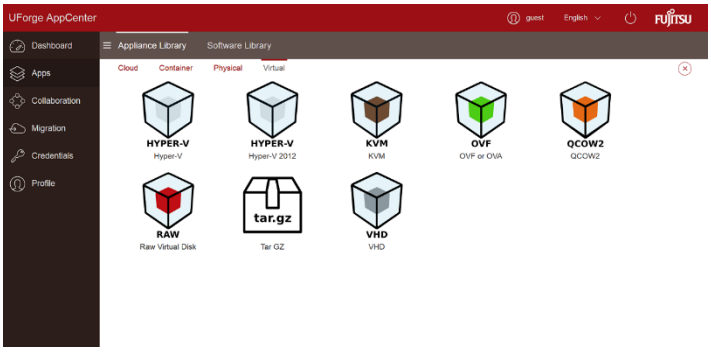
Modeling lets you test and run applications consistently across any cloud, virtual or container environment. This means you can easily use different infrastructures for dev, unit test, QA, pre-prod, and production, without your developers and operations staff needing to become experts in a multitude of clouds and cloud-specific tools. It also offers the ability to insert repeatability and consistency across DevOps processes with full software governance.

Any OS, Any Cloud

UForge AppCenter is a fully agnostic platform supporting leading operating systems and all leading clouds and hypervisors so you can easily integrate into a hybrid IT environment and ensure reversibility across platforms.

UForge AppCenter supports **Windows Server 2008R2, 2012, 2012R2 and 2016**, as well as all leading Linux operating systems: **Red Hat Enterprise Linux, SUSE Enterprise Linux Server, CentOS, Fedora, Debian, Ubuntu, OpenSUSE** and **Scientific Linux**. It also supports hardened or customized versions of Linux.

UForge AppCenter supports cloud, virtual and physical infrastructures. Supported clouds include **Abiquo, Apache CloudStack, AWS, Eucalyptus, Flexiant, FUJITSU Cloud Service K5, Google Compute Engine, Microsoft Azure, OpenStack, Oracle Cloud, VMware** etc.). UForge AppCenter also supports containers including **Docker**, and leading hypervisors including **Hyper-V, KVM, OVF/OVA, VMware, Xen, XenServer** and many more.



Built for Cloud with 100% Automation

Available on-premise or as a SaaS platform, UForge AppCenter has been designed from the ground up for cloud environments. UForge AppCenter includes 100% API coverage with multiple SDKs (REST, Java, Python) so you can fully automate all your processes and easily integrate with other tools.

A Choice of Interfaces

In addition to APIs, UForge AppCenter is accessible via a GUI that provides a single console for the full suite of templating, migration and collaboration tools. Using the graphical interface, you can visually design application stacks and migrate live servers. Open-source command-line tools enable you to define templates and generate images from a simple configuration file.

Technical Details

UForge Admin Server System Requirements		
Hardware		FUJITSU Server PRIMERGY RX, TX and BX
	Notes (Recommended)	CPU: 64bit, 8 or more cores Memory: 16GB or more Local Hard Drive: 400GB Network Storage: 200GB (depending upon usage)
Operating System	**CentOS**	CentOS 7, 64bit
Supported Guest Operating Systems		
Linux		
	Free Linux	CentOS 5.2+, 6 (32bit & 64bit), 7(64bit)
		Fedora 8 to 22 (32bit & 64bit)
		Debian 6 (Squeeze), 7 (Wheezy), 8 (Jessie), 9 (Stretch) (32bit & 64bit)
		Ubuntu LTS 10.04 (Lucid), 12.04 (Precise), 14.04 (Trusty), 16.04 (32bit & 64bit)
		OpenSUSE 11.3, 11.4 (32bit & 64bit), 12.1, 12.2, 12.3 (64-bit), Leap 42.1, 42.2, 42.3 (64bit)
		Scientific Linux 5.2+, 6 (32bit & 64bit), 7 (64bit)
	With Correct Licenses	Red Hat Enterprise Linux 5.2+, 6 (32bit & 64bit), 7 (64bit)
		SUSE Linux Enterprise Server 11.3, 11.4 (32bit & 64bit), 12.1, 12.2, 12.3 (64bit)
		Oracle Linux 5.2+, 6 (32bit & 64bit), 7(64bit)
Windows		Microsoft Windows Server 2008R2, 2012, 2012R2, 2016
Supported Target Environments		
Cloud		Abiquo, Amazon AWS, Azure Resource Manager, Apache CloudStack, Eucalyptus, Flexiant, FUJITSU Cloud Service K5, Google Compute Engine, Microsoft Azure, OpenStack, Oracle Cloud, SUSE Cloud, VMware vCloud Director
Virtual		Hyper-V, KVM, OVF/OVA, QCOW2, RAW Virtual Disk, Tar GZ, Vagrant Base Box, Virtual Box, VHD, Vmware vCenter, VMware Server, Xen, XenServer
Containers		Docker, LXC
Physical		ISO, PXE

More information

Fujitsu products, solutions & services

Products
www.fujitsu.com/global/products/
In addition to the UForge AppCenter, Fujitsu offers a full portfolio of other computing products.

Computing products
- Storage systems: ETERNUS
- Server: PRIMERGY, PRIMEQUEST, Fujitsu M10, BS2000/OSD Mainframe
- Client Computing Devices: LIFEBOOK, STYLISTIC, ESPRIMO, FUTRO, CELSIUS
- Peripherals: Fujitsu Displays, Accessories
- Software
- Network

Product Support Services with different service levels agreements are recommended to safeguard each product and ensure smooth IT operation.

Solutions
http://www.fujitsu.com/global/solutions
The Fujitsu solutions combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships. Fujitsu's Solutions include parts of one or more activity groups (e.g., planning, implementation, support, management, and training services) and are designed to solve a specific business need.
Infrastructure Solutions are customer offerings created by bringing Fujitsu's best products, services and technologies together with those from partners to deliver benefit to our customers' businesses.
Industry Solutions are tailored to meet the needs of specific verticals.
Business and Technology Solutions provide a variety of technologies developed to tackle specific business issues such as security and sustainability, across many verticals.

Services
www.fujitsu.com/global/services/
Several customizable Fujitsu Service offerings ensure that IT makes a real difference and delivers true business value. We do this by leveraging our extensive experience in managing large, complex, transformational IT programs to help clients in planning, delivering and operating IT services in a challenging and changing business environment.

Application Services support the development, integration, testing, deployment and on-going management of both custom developed and packaged applications. The services focus on delivering business and productivity improvements for organizations.
Business Services respond to the challenge of planning, delivering and operating IT in a complex and changing IT environment.
Managed Infrastructure Services enable customers to deliver the optimal IT environment to meet their needs – achieving high levels of IT service quality and performance for data center and end user environments.

Fujitsu green policy innovation

www.fujitsu.com/global/about/environment/
Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at:

Green Policy Innovation

More information

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