IT MEGATRENDS:
Beyond Desktop Virtualization: Workspaces Change the Way We Work

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QUO VADIS DESKTOP

When Apple introduced the iPad in 2010, the era of mobility experienced an enormous boost. A new way of working was born. Today, there’s an app for almost everything (1.2 million apps are available in the Apple Store and a similar number for Android). Over the past four years the PC and laptop market lost noticeable ground to mobile devices and whenever concepts like “bring your own device” (BYOD) are discussed, people think of tablets first.

DO APPS AND “SUPER MOBILE” REALLY INCREASE PRODUCTIVITY?

But what is the magnitude of the productivity gains that mobile devices add throughout the average business user’s workday? Haven’t we all experienced the limitations of tablet computing? Apps are mainly designed in a lightweight and isolated manner. This results in slowed productivity when our daily work requires the parallel use of multiple applications and data sources to optimally support critical business processes. Maybe that’s one of the reasons why, for the first time in years, Gartner has reported a slowed growth of the tablet market and a small but definite increase of PC sales figures.

DOES VDI RESOLVE THE PRODUCTIVITY CHALLENGE?

While we all agree that tablets and their app concept have their limitations, we do not want to miss out on the speed and ease-of-use of the iPad and its cousins. But how can our proven and efficient desktop work style be applied to all of our favorite devices?

Virtualizing traditional desktop operating systems and hosting them in the corporate data center, or even in the cloud, provides advantages in terms of management, security, disaster recovery, compliance and cost. However, these benefits do not help business users become more productive. They also do not conclusively address the management challenge where multiple operating systems per user have to be secured, kept compliant and populated with the right applications on the right device at the right place and time.

The job of a modern operating system is to mainly “stay out of the way” and make the end user experience as frustration-free as possible. The fact that Apple manages to charge a hefty premium on what we all believed to be commodities (desktop and laptop computers) backs up this claim. This underlines that users “just want to get stuff done” without having to dig into a complex control panel, or encountering inexplicable error messages or exhausting computer memory just to run essential apps. Even the most elegant operating system however still aims at providing users with at least some locally installed apps and with some type of local storage access. End users then start to improvise by stitching together the applications and data they require, often through the use of a combination of approved and unapproved applications and services. To keep up with today’s mobile work style, enterprise IT needs to offer applications, content and data in a more granular manner, independently of an operating system.
WORKSPACES CHANGE THE WAY WE WORK

Now wouldn’t it be nice if we could have a fully web-based workspace that delivered all of our applications (local and remote) and data through one browser-based interface across desktops, laptops, tablets and smartphones and possibly the microwave, independently of the operating system?

WORKSPACES: ROLE BASED, INTUITIVE AND CUSTOMIZABLE

Business users complete their daily tasks by utilizing numerous applications, files and data sources. A bank teller for example spends most of his time utilizing the same core banking application to serve his customers. The branch director requires a much more complex set of standard and banking specific applications, while the CFO needs yet another mix of applications, data and documents. In short, each staff role within our fictional financial institution has different requirements in terms of the set of software, data and documents, as well as the end devices that need to be provided to optimally support the work day. Ideally, these would be integrated in a task or even business process-centric manner.

DYNAMIC: USER SPECIFIC AND CUSTOMIZABLE

The image on the next page of a workspace illustrates this concept, showing the defined set of web parts, apps and services for an employee in Sales for example:

- **Applications:** Salesforce, PowerPoint, Visio, Acrobat, Media Player, Excel, Photoshop, Outlook, Coffee Cup. These applications could be delivered via one or many technologies, such as Citrix XenApp, Microsoft RDS, VMware PCoIP, HTML5, ASG-AppMirror or even locally installed.

- **Web parts:** Email inbox, calendar, notifications from IT support (password change necessary, status of new service request), and create and track new service requests.

- **Documents:** The most recently used documents are available directly from the workspace.
Even though the default workspace (and its webparts) is already optimized for a specific user or group, all workspaces can be easily modified to meet the individual user requirements and preferences.

The next image shows a ASG Workspace with a menu bar for apps, data, my devices, IT support, my requests to provide users with customizable tabs where additional business processes can be supported.
Clicking on the “IT Support”-tab, for example, could lead the user to a page that could look similar to the image below, providing corporate staff with access to live support, automated problem resolution, a knowledge base, and password reset capabilities as well as the ability to add new applications directly to the workspace.

Example of an “IT Support”-tab of the ASG Workspace: A page for direct access to live support, automated problem resolution, a knowledge base, and password reset.

The workspace concept aims at providing everything individual users need to efficiently complete all of their daily tasks on any type of device. Ideally, end users will have the ability to customize their workspace to become even more productive. This can mean removing applications and web parts that are rarely used or adding new ones. Tight integration with an enterprise service store could enable users to search for an app or service from their workspace. These could then be automatically added to the workspace for instant use.
HYBRID: APPLICATIONS CAN COME FROM ANYWHERE

Business users today expect from corporate IT to enable them with their favorite productivity apps. These can be delivered via public cloud services (SaaS) –Dropbox, Basecamp, Skype, Google Drive, LinkedIn, Office365, Trello– as published apps (via Citrix ICA, Microsoft RDS or VMware’s PCoIP) through the corporate data center or locally deployed to the end device.

Hybrid Workspaces offer a single view on all of these applications as well as on required files and data and other IT services.

SEAMLESS INTEGRATION OF AN IT SERVICE STORE

It is a known fact that our work environments and styles are subject to constant change. This means that our needs for IT services - apps, file sharing, collaboration tools, etc. - keep changing too. And as we strive to make the most out of our work days, we do not like to follow long request processes and wait for days to get what we need.

Integrating a self-service focused, workflow-based IT Service Store into the ASG Workspace shortens efforts and time for both sides, the user and the IT department, and therefore boosts productivity and user experience.

Smart IT Service Stores or even store web parts in the workspace itself can suggest lower-cost alternatives when a costly app or service is requested, e.g. use Microsoft Paint or GIMP instead of Adobe Photoshop.

In short, from a business user perspective, ASG Workspaces aim at providing the best user experience and efficiency for app, content and IT service access and request in an easily customizable and manageable way.
HOW THE IT DEPARTMENT BENEFITS FROM WORKSPACES
In addition to the end user relevant advantages of dynamic hybrid and customizable workspaces, the workspace concept can yield significant benefits for the IT department too. This is mainly due to the workspace principle that no longer focuses on the management of the entire operating system, but on delivering the required applications, data and services directly to a browser-based dashboard in a targeted manner.

CENTRAL GOVERNANCE
Configuration drift, often caused by end users installing their own unapproved software (shadow IT) can result in dramatic security concerns and even legal liabilities. Workspaces – in combination with enterprise IT service stores – provide central governance by enabling end users to add their favorite SaaS and local applications to their workspaces. This takes away the incentive to go around IT and putting confidential business documents in their private Dropbox account or using unsanctioned project management software that does not appropriately protect intellectual property. This type of central governance also enables IT to monitor user behavior in terms of which groups typically leverage what software applications. Users can then be encouraged to free up software licenses that are mostly unused.

STORAGE COST SAVINGS
Virtual desktops mostly consume expensive tier 1 SAN storage to ensure optimal performance and reliability. In addition, capacity planning is difficult, as the daily “boot-storms” have to be accommodated, as well as software patches and other specific performance requirements. The workspace concept does not need to handle entire operating systems (no more “boot-storms”), as it only serves up the apps, data and services to browser-based dashboards.

CONSISTENT DELIVERY ACROSS DEVICES
 Delivering the same set of SaaS, mobile, virtual and locally hosted applications to any device, depending on user role, location or device type dramatically reduces management effort. Especially when applications and data are delivered via HTML5 - without the need for a local client - workspaces will ensure a consistent user experience, no matter the device type or operating system.

FLEXIBLE MAINTENANCE AND TRUE HIGH AVAILABILITY
The workspace concept enables a much more granular approach to maintenance, failover and disaster recovery than could be achieved through traditional desktops or VDI. During scheduled or unscheduled maintenance windows, individual apps can be repaired, replaced or updated, without affecting other parts of the user experience. High availability can be configured for individual applications or on the workspace level, ensuring optimal SLA compliance.
THE ASG TAKE ON WORKSPACES

ASG’s workspaces (ASG-CloudCockpit™) are fully focused on providing the best user experience and efficiency for app, content and service delivery through easy customization and management.

THE FOLLOWING CHARACTERISTICS MAKE ASG-CLOUDCOCKPIT UNIQUE:

- One user focused workspace to access all your applications, content and files
- TCO-optimizing flexibility for application delivery via Citrix, Microsoft, VMware technologies or ASG-AppMirror HTML5 solution
- Consistent user experience at PCs, tablets and all mobile devices
- Centrally manage and use SaaS, virtual, physical and local apps
- Role specific access management and user customizable workspaces
- Integrated access to service desk chat and remote control
- Central management results in compliance, security and cost control

KEY TAKEAWAYS

1. Workspaces constitute the next step in the evolution of delivering user- and role-specific apps, content and services.
2. The workspace concept enables business staff to receive a consistent user experience on any device, leading to increased efficiency and productivity.
3. From a management perspective, workspaces enable the central delivery and control of local, remotely hosted, virtual and SaaS applications.
4. Central governance and the elimination of shadow IT are great side effects of workspaces.