

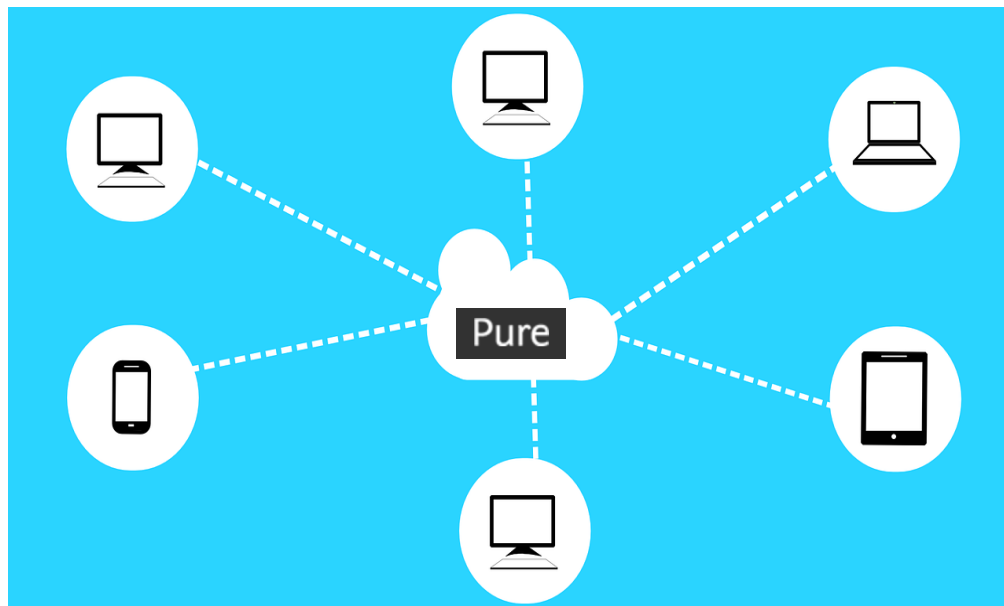
Moving to the cloud: Self-AWS hosting

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Great reasons to move Pure to the cloud

- Better cost of ownership
 - Time/resource
 - Cap-ex free approach
- SaaS Pure setup
 - Secure/Robust
 - Access to latest versions
 - Flexible/Scalable
 - State of the art
 - Environmentally friendly



Benefits of AWS

- Robust & elastic computing environment
 - Region availability – 99.95% (more than 1 availability zone must be down)
- Easy server (asset) management
 - Easy to increase / decrease capacity
 - If a server breaks down, spin up a new one immediately and continue
 - You don't need to buy / procure new servers.
- Facilities – data centers
 - The data centers are state of the art, with proper resilience built in and are capable of handling power outages etc.
 - AWS has many years of experience in designing, constructing and operating large-scale data centers
 - Automatic fire detection and suppression equipment has been installed to reduce risk.
 - Built in low-flood risk zone

What does Elsevier provide

- Investment to support hosting approaches now and into the future
- New versions installed as per service window (documented in release notes) – includes all major AND minor release versions
- Managed backup and retention
- Active service monitoring (uptime etc)
- Elasticity dependent on usage of AWS servers
- SLA based uptime promises
- Better support at scale

Section 2

Hosting Options available

Cloud hosting options

- **Pure Cloud Hosting**

- A cloud hosting solution for one (production) environment, using a shared server (with own database), where Pure upgrades are installed automatically upon release.

- **Pure Cloud Hosting - Dual environments**

- A cloud hosting solution for two environments (staging and production), using a shared server (with own databases). Pure upgrades are installed automatically upon release. Can be scaled if required.

- **Pure Cloud Hosting – Custom**

- A cloud hosting solution for one (production) environment, using a non-shared, private server, where Pure upgrades are installed, after new release scheduled upon customer request. Can be scaled if required.



Section 3

What are the differences from self hosting

Some fundamental differences

- **Control over the upgrade cycle (if not on custom option)**
 - Customers are all on latest version (standard hosting)
 - Updates per customer request – similar to current recurring install services (custom hosting)
- **Limited access to environments**
 - Single or Dual Hosting options for standard hosting
 - Multiple installs priced per environment (custom hosting)
- **Allocated storage space**
 - Standard 300Gb – but can be expanded
- **Changes to version upgrade approach for universities**
 - University testing approaches need to be different for hosted Pure

Questions raised to date..

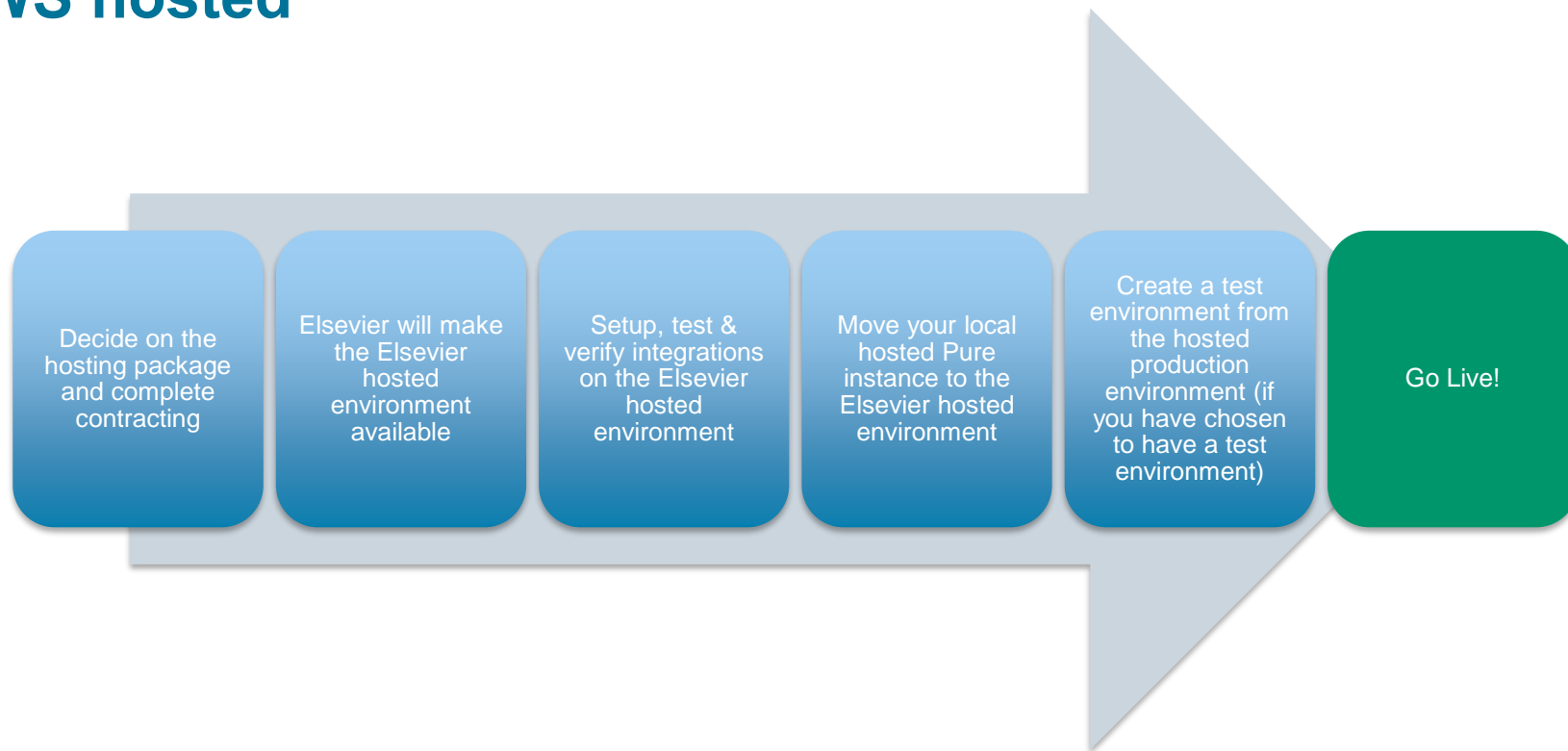
- Performance
- Control of data
- Control over pace of upgrades
- Running out of storage space
- Security – keeping the data safe, especially where there may be national legal requirements
- Connecting to internal systems (SSO, E-prints, synchronizations etc.)



Section 4

Process for moving to the cloud

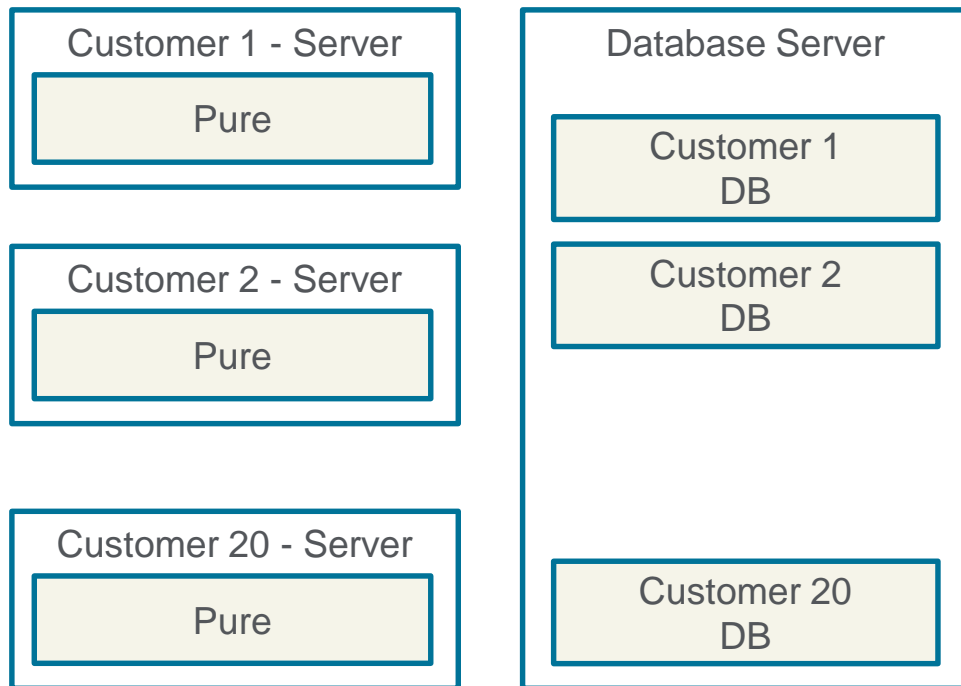
Standard processes developed for transferring local to AWS hosted



Section 5

Brief Technical Overview

Overview of AWS infrastructure – Single / Dual Environment

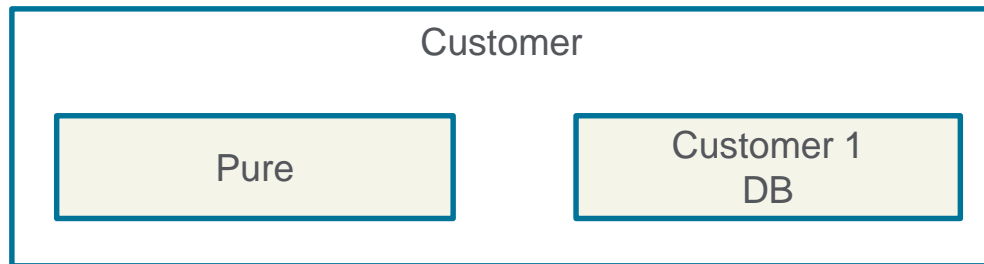


Each customer has their own dedicated virtual server that hosts the Pure Software

The database is running on a shared database server with up to 20 pure customers.

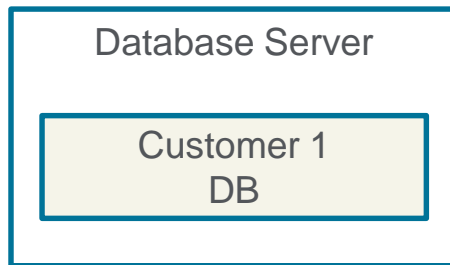
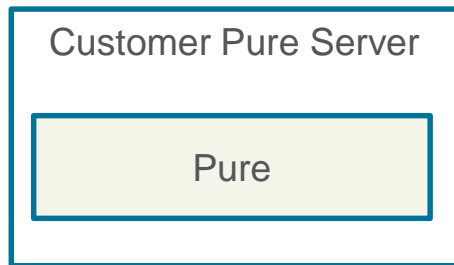
Data is isolated in separate databases, i.e. not possible for Customer 2 to accidentally see Customer 1's data

Overview of AWS infrastructure – Custom/Dedicated



Current setup.

Pure and Database co-located on same virtual server.



Future setup (2018)

Pure and Database on separate servers. Better individual scaling when needed

Thank you!

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