

BEDIFFERENT

ACE 2012 INTERNATIONAL





ACE 2012
INTERNATIONAL

Right-sizing Aras for Your Company

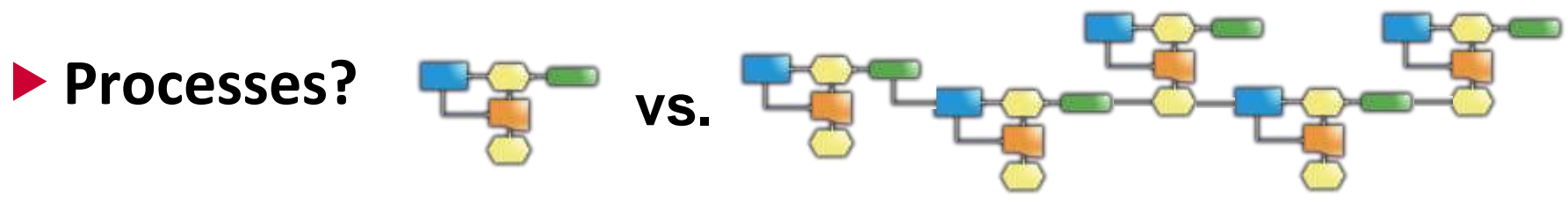
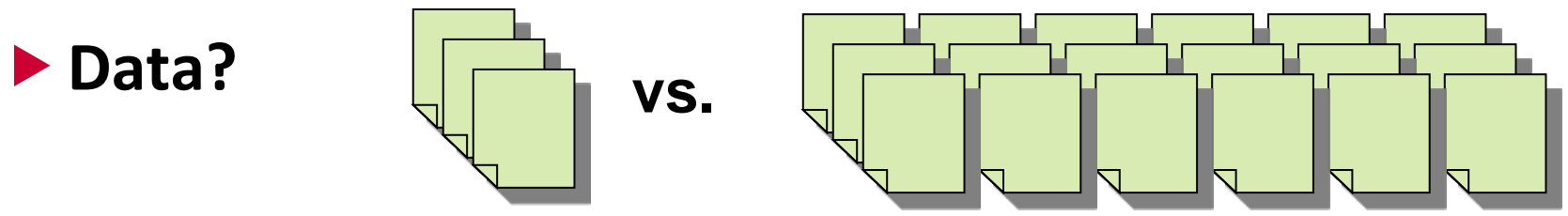
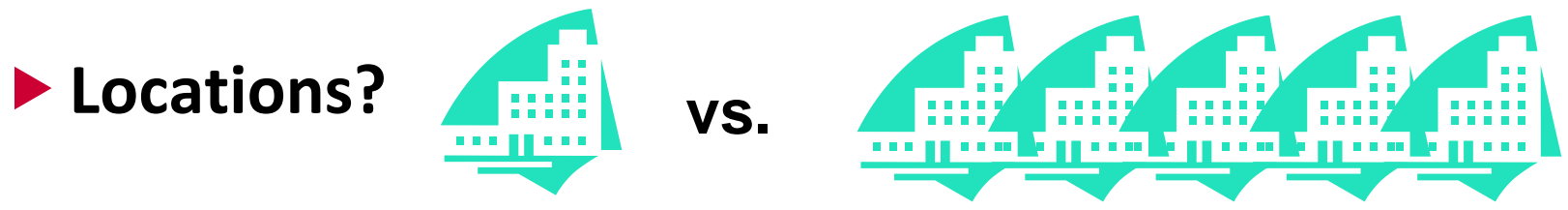
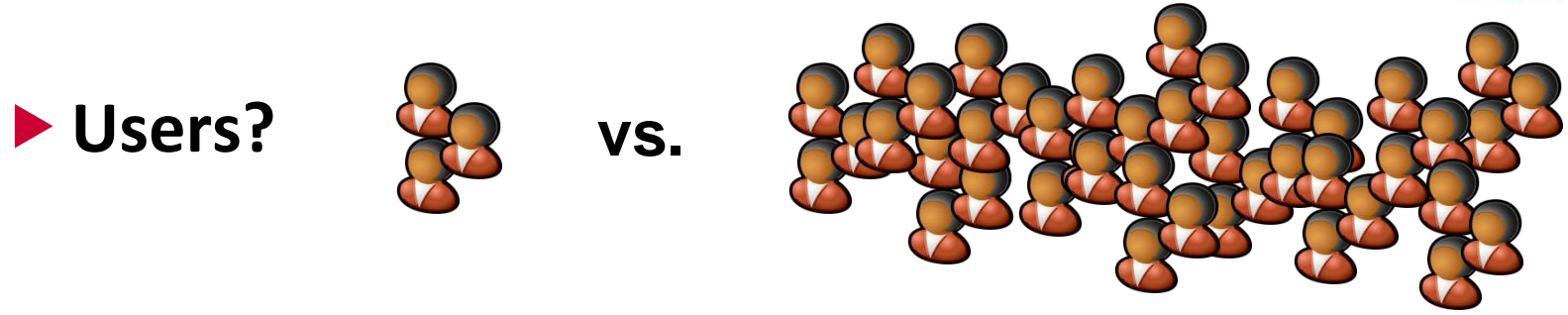
Rob McAveney

Director of Product Management

Aras www.aras.com



How to Measure?



User Count



▶ Total number of users

- 50 or 50,000+ ?

▶ Number of concurrent users

- 10 or 10,000+ ?

▶ User types

- # People that need to submit data?
- # People that need to view/access data?
- # People that need to participate in processes?

Location Count



▶ Physical location count

- 1 or 100+ ?

▶ Network infrastructure

- Bandwidth
- Latency

▶ Encryption requirements

▶ Supplier and/or customer access

- Suppliers? How many? 10 or 10,000+ ?
- Customers? How many? 5 or 50,000+ ?

▶ All of these options are possible with Aras and the right configuration

Amount of Data



▶ Number of vaulted files

- 10k or 1M+ ?

▶ File size

- Megabytes or Terabytes or even Petabytes?

▶ Database

- Bills of Material
- Process Plans
- Change & Configuration Management
- Compliance Data

▶ CAD Integrations

Process Complexity



▶ **Process complexity is not a function of user count**

- Big companies can have simple processes
- Small companies can have complex processes

▶ **PLM Scope**

- BOMs, Document Management and Engineering Change
- Outsourced Manufacturing & Quality Assurance
- Program Project Management
- Systems Engineering
- Formulas & Recipes

▶ **Regulatory compliance**

Deployment Options

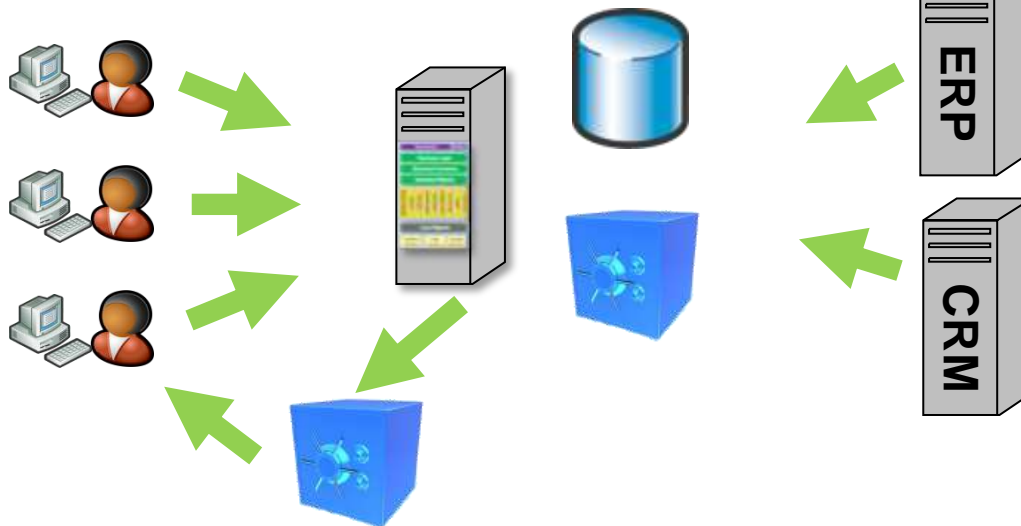
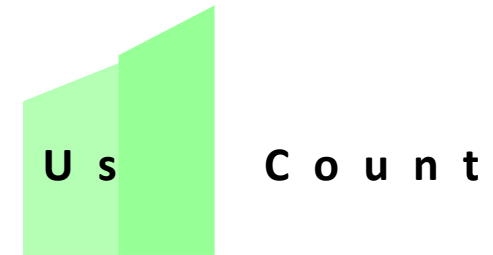
- Single server for everything Aras

User Count



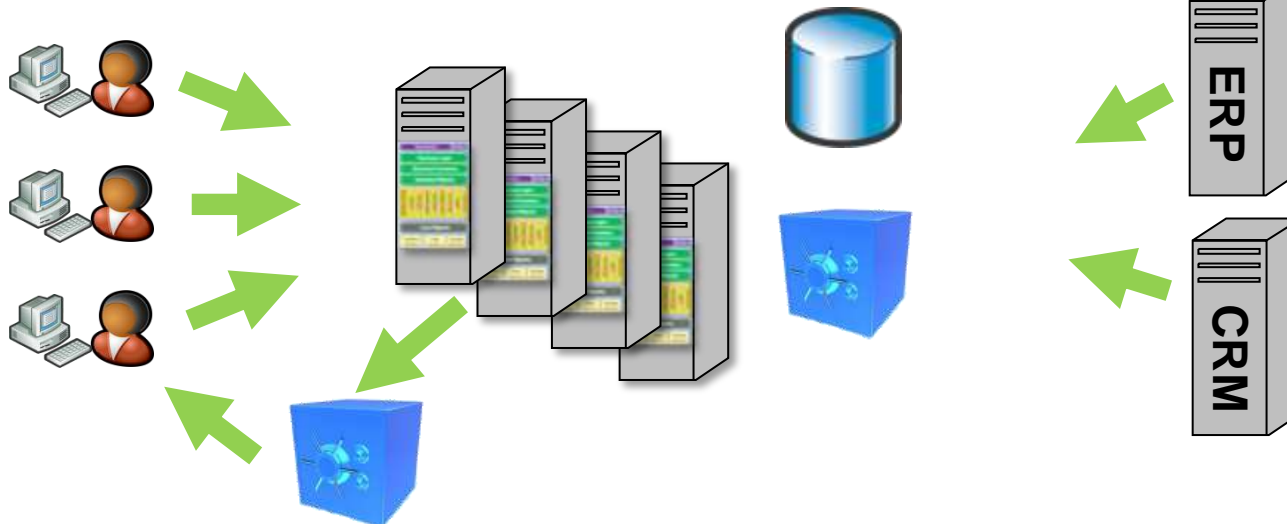
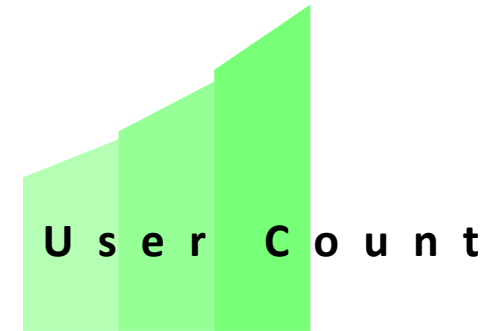
Deployment Options

- Distributed/replicated vaults geographically close to users



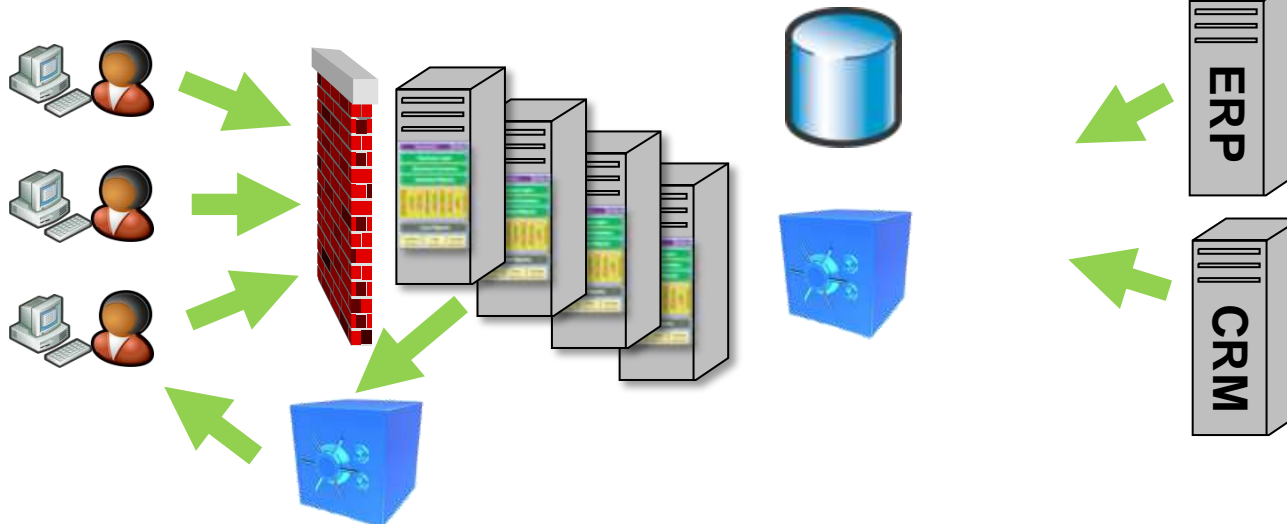
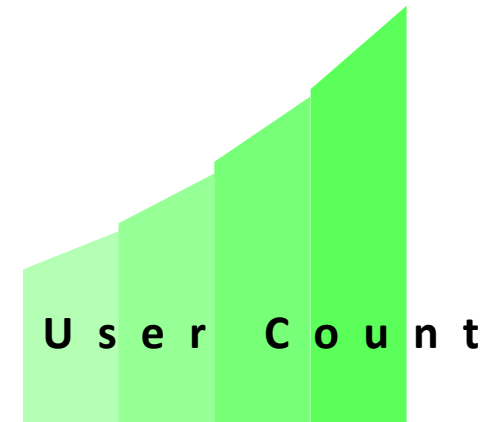
Deployment Options

- Load balanced application servers



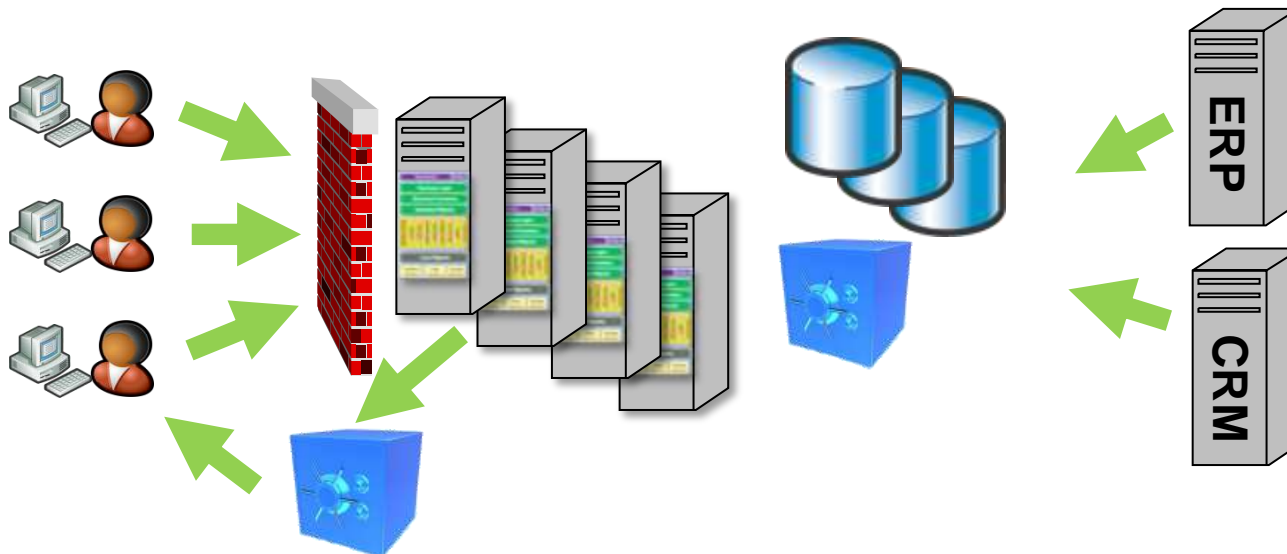
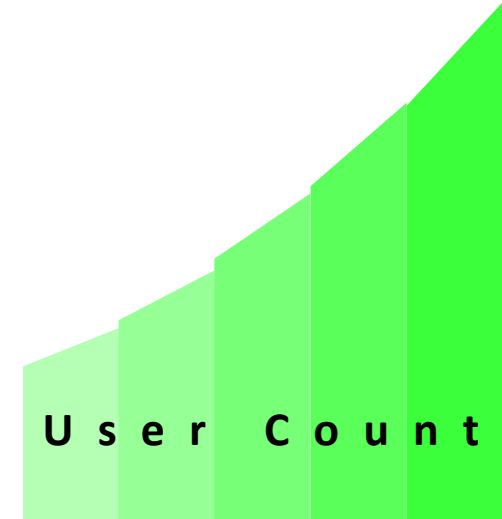
Deployment Options

- Hosted environment through firewalls with encryption



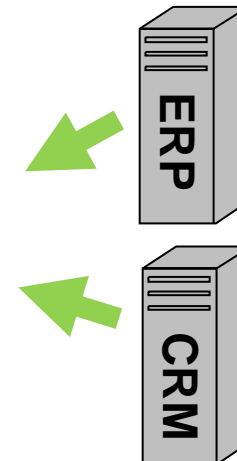
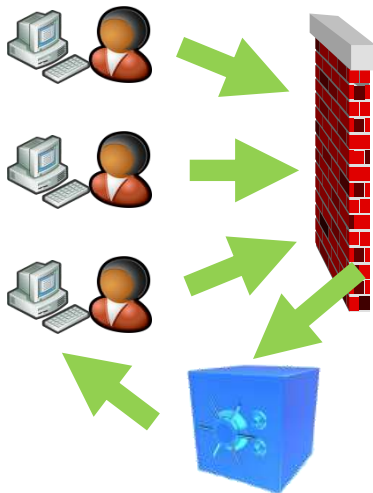
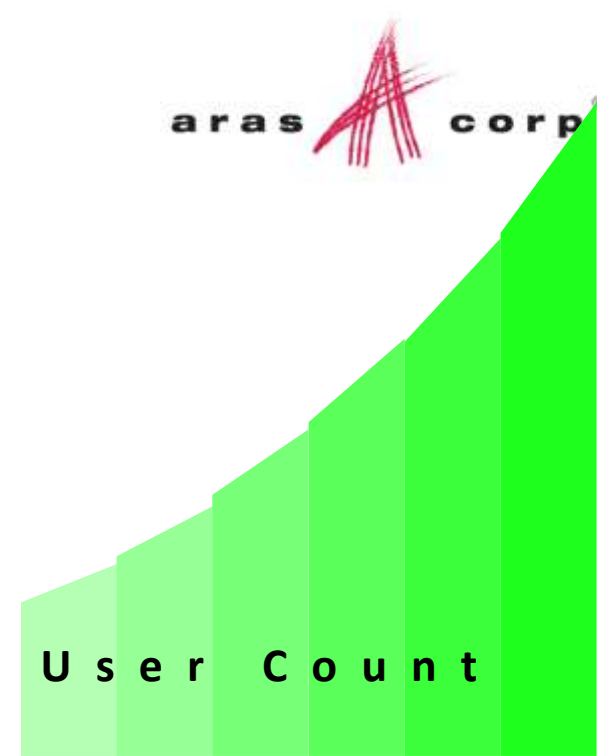
Deployment Options

- Private cloud with shared/replicated database



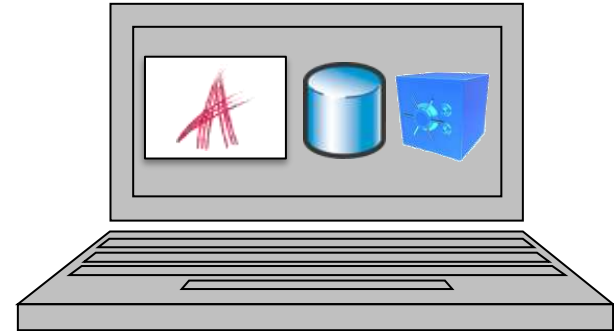
Deployment Options

- Public cloud with virtualized resources and replicated vaults behind the firewall like Aras Spectrum on Azure

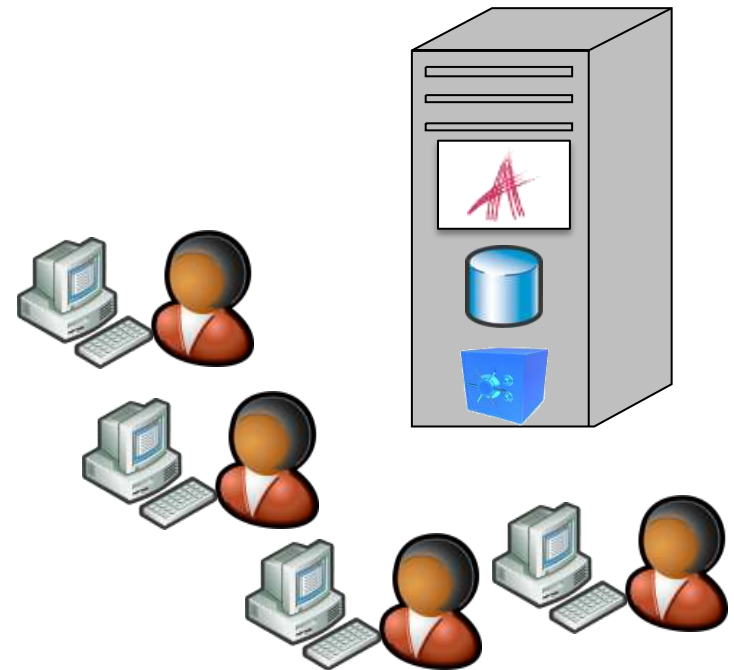


Scaling Down

- ▶ Laptop for evaluation, demo, development, etc.

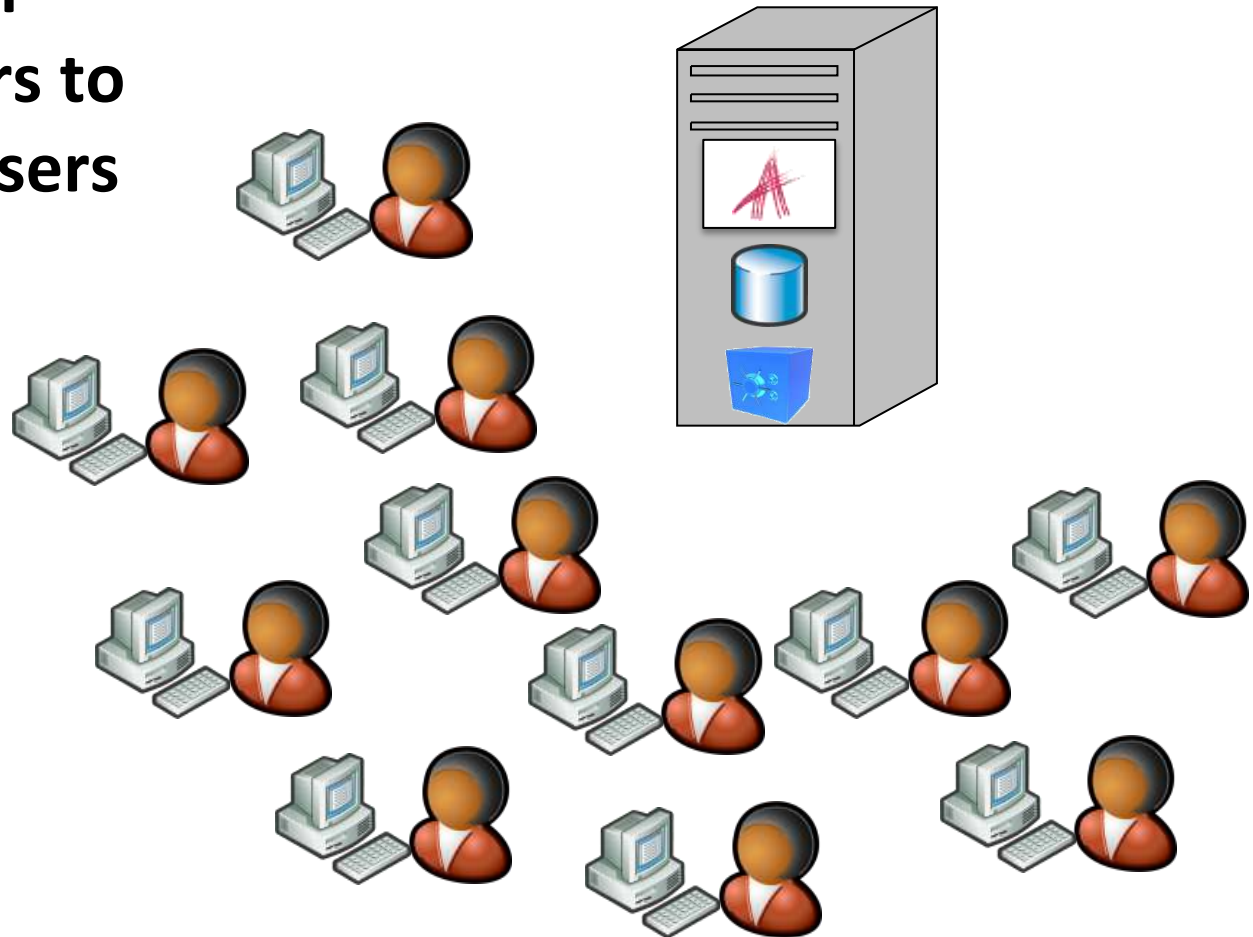


- ▶ Single small server for a workgroup



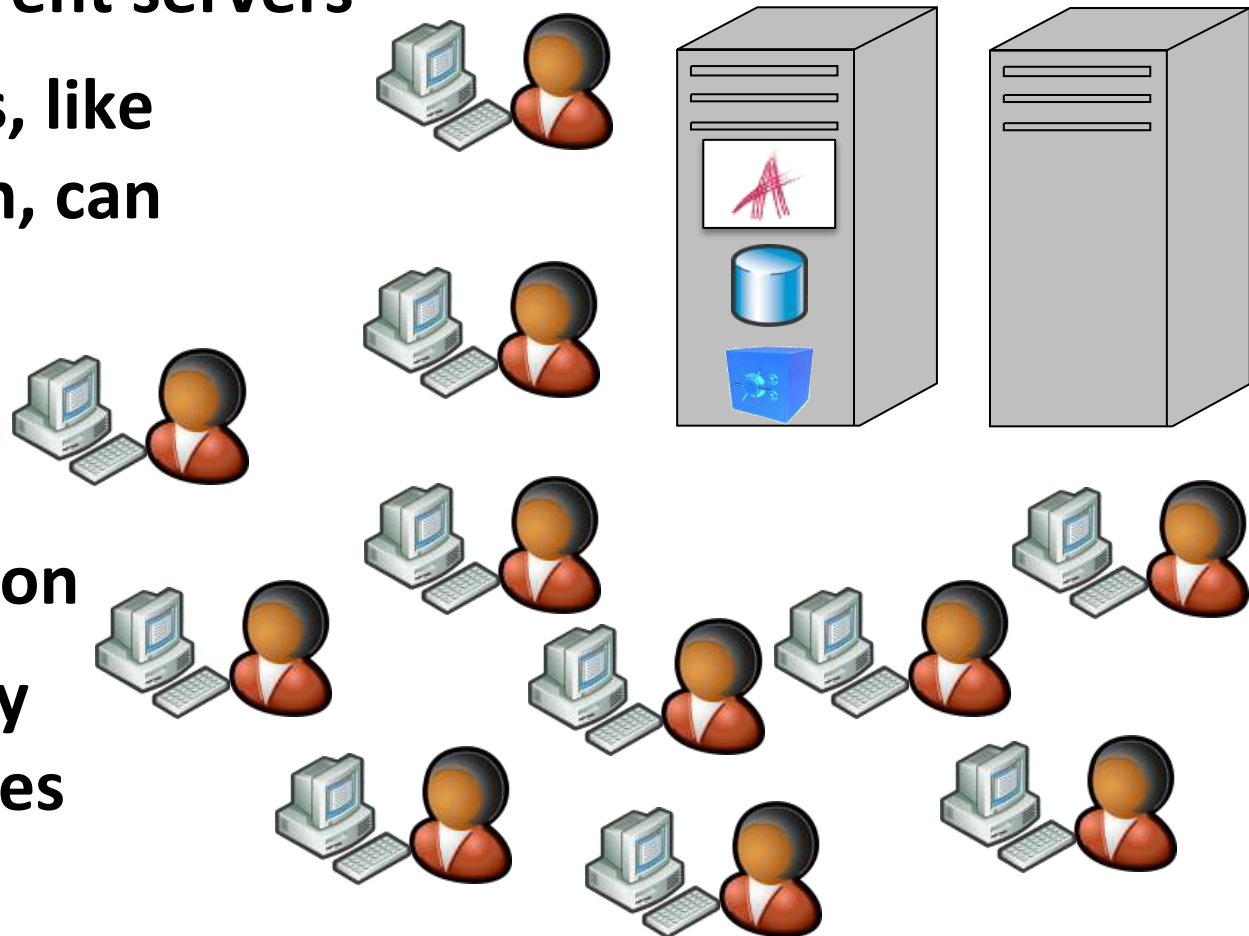
Scaling Up

- ▶ A single server configuration will work from dozens of users to hundreds of users



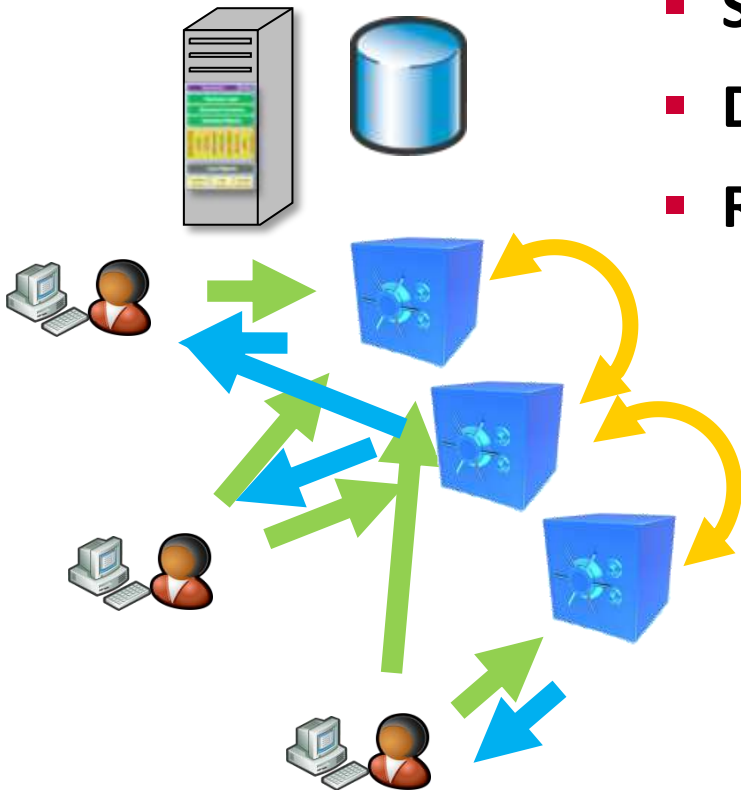
Multiple Server Configurations

- ▶ Move the vault service to multiple different servers
- ▶ Other services, like file conversion, can easily be moved to other servers
- ▶ Vault replication
- ▶ Good for many distributed sites

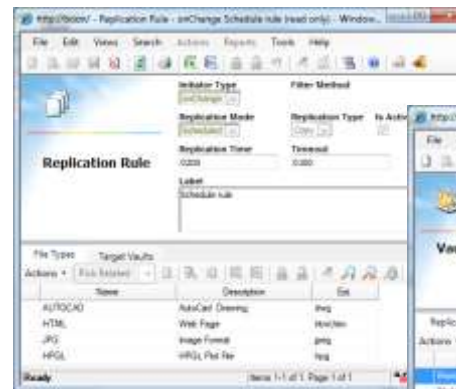


Vault Replication

▶ Automatic replication of files across many vault servers

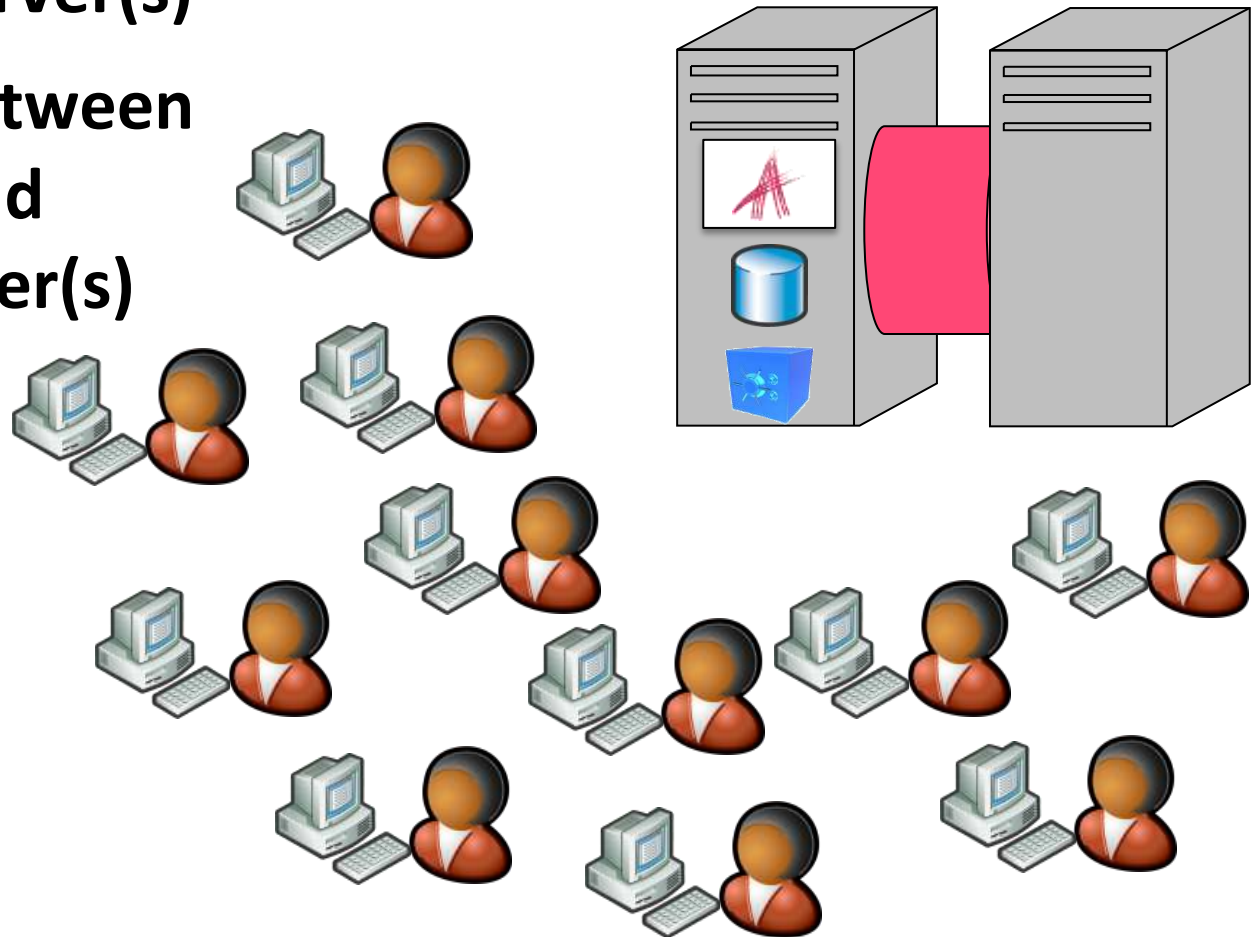


- Shared Vaults
- Distributed Vaults
- Replicated Vaults
 - On Demand or Scheduled replication
 - Vary rules by vault, file type, group, etc.



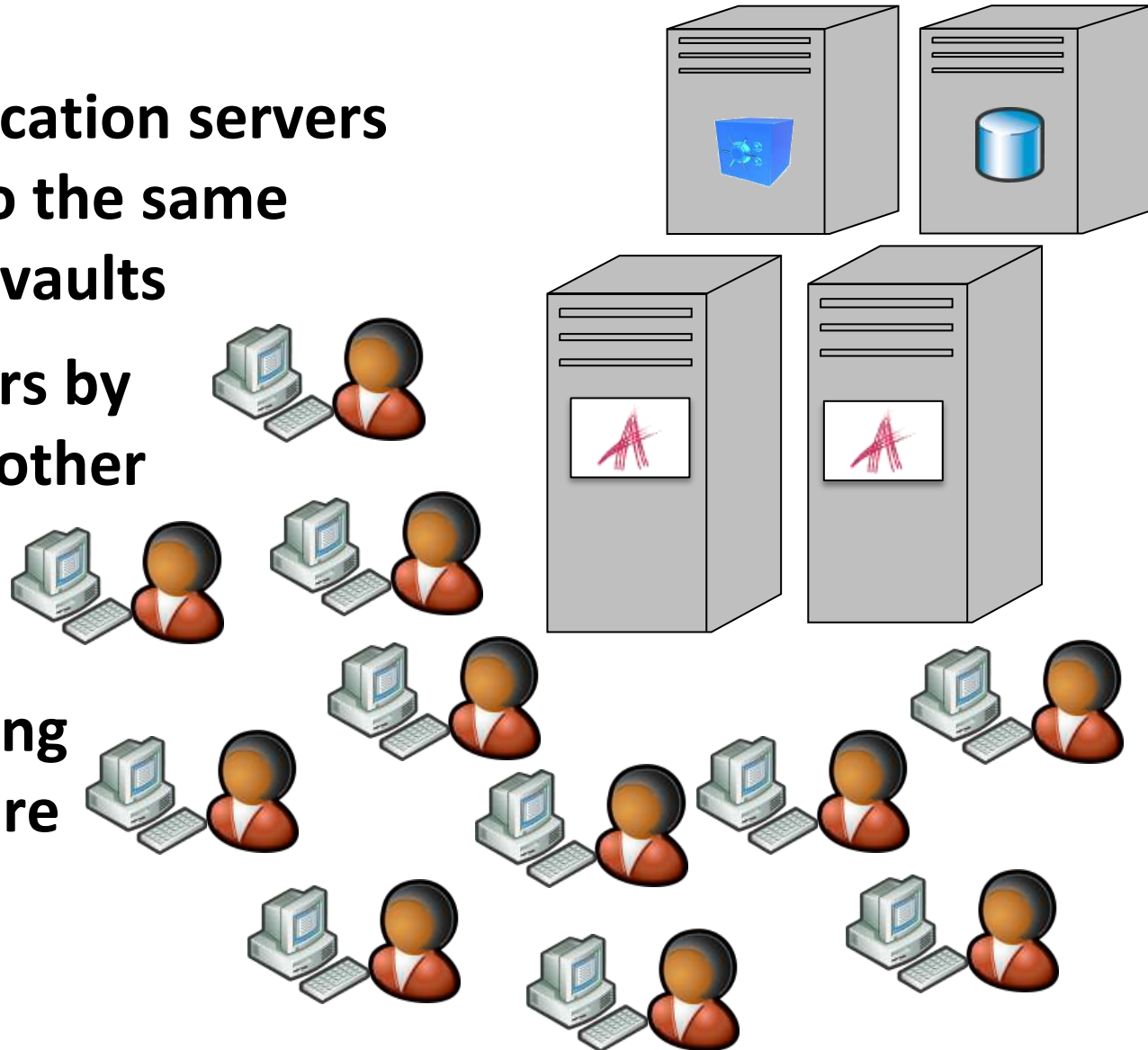
Separate Database Server

- ▶ Run the database on it's own server(s)
- ▶ Bandwidth between application and database server(s) is critical



Multiple Application Servers

- ▶ Multiple application servers can connect to the same database and vaults
- ▶ Segregate users by location or another factor
- ▶ Load balance using underlying IT infrastructure



Achieving the Right Size



- ▶ **Make sure you factor in the number of users and locations, amount of data and process complexity**
- ▶ **Scaling down is simple – just install on a single server**
- ▶ **Many options for scaling up & out, including splitting servers, replication, load balancing, etc.**
- ▶ **Infinite scalability can be achieved using cloud technologies such as Aras Spectrum on Azure**



ACE 2012
INTERNATIONAL

Right-sizing Aras for Your Company

Rob McAveney

Director of Product Management

Aras www.aras.com

