YSOFT SAFEQ 6 ON MICROSOFT® AZURE®

INTRODUCTION

Microsoft Azure is a comprehensive set of public and hybrid cloud services that developers and IT professionals use to build, deploy and manage applications through a global network of datacenters.

Public cloud services are increasingly used by organizations seeking the cost reduction, scalability and reliability cloud computing offers. For many, cloud services provide the additional advantage of relieving IT infrastructure overhead to work on other high-value projects.

This technical note describes how organizations are using YSoft SafeQ 6 on Microsoft Azure. In each of the four options described below, YSoft SafeQ is deployed on Microsoft Azure utilizing hardware and software that is isolated for the customer.

- SMB – a small, single site location where YSoft SafeQ's entire architecture is on Microsoft Azure
- Large organizations – a large, single site location or multi-site locations where YSoft SafeQ's entire architecture is on Microsoft Azure
- Large organizations – a large, single site location or multi-site locations where YSoft SafeQ is partially on Microsoft Azure and partially on-premise (commonly referred to as hybrid)
- Partner managed service – akin to hybrid where the YSoft SafeQ 6 tiers on Microsoft Azure are managed by a service provider

From an architectural perspective, any of the options above can be combined in a single solution.

THE USER EXPERIENCE WITH YSOFT SAFEQ 6 ON MICROSOFT AZURE

It is important to note that in any of these scenarios, users enjoy the full functionality of YSoft SafeQ 6, including Automated Scan Workflows. Users print from one print queue and Print Roaming® – the ability to pull-print from any printer in the environment – and mobile printing are fully supported. Client Based Print Roaming is also supported. See the section on page 8 for other details.

THE ADMINISTRATOR EXPERIENCE WITH YSOFT SAFEQ 6 ON MICROSOFT AZURE

The administrator experience of centralized print management and document capture is also the same on Microsoft Azure. Administrators access YSoft SafeQ through a single dashboard.

One of the differentiating benefits of YSoft SafeQ 6 is the ability to scale throughout a single organization or to multiple locations. The ability to easily scale is maintained on Microsoft Azure and, it could be argued, is one of the reasons YSoft SafeQ was rearchitected in version 6. It is recommended to read the YSoft SafeQ 6 Architecture Overview white paper for details on the YSoft SafeQ 6 architecture.

YSOFT SAFEQ 6 ON MICROSOFT AZURE

SMBs

YSoft SafeQ 6 in Microsoft Azure is ideal for small to medium-sized businesses, typically with a single site location, when cost is the major factor. Depending on the SMB's requirements, the entire system can be operated from a single server.

Figure 1 shows the most cost effective YSoft SafeQ 6 scenario for SMBs. All YSoft SafeQ 6 architecture tiers, except Client Services, are on Microsoft Azure.

The YSoft SafeQ Client is installed on each workstation and, with Client Based Print Roaming, print jobs print directly to any printer in the YSoft SafeQ 6 environment; in other words, YSoft SafeQ 6 is still able to provide a direct print queue for pull-printing on any device and the ability to reprint favorite jobs. Scan and print job meta data is collected for reporting and accounting purposes. This approach saves bandwidth, which can often be a considerable expense.

Mobile printing is accomplished by sending an attachment to an Office 365 email address.

Lastly, YSoft SafeQ 6 supports PostgreSQL, MS SQL or Microsoft Azure SQL databases and a template for viewing the data in Microsoft PowerBI is available. See the section on Microsoft Azure SQL and Microsoft PowerBI at the end of this document.
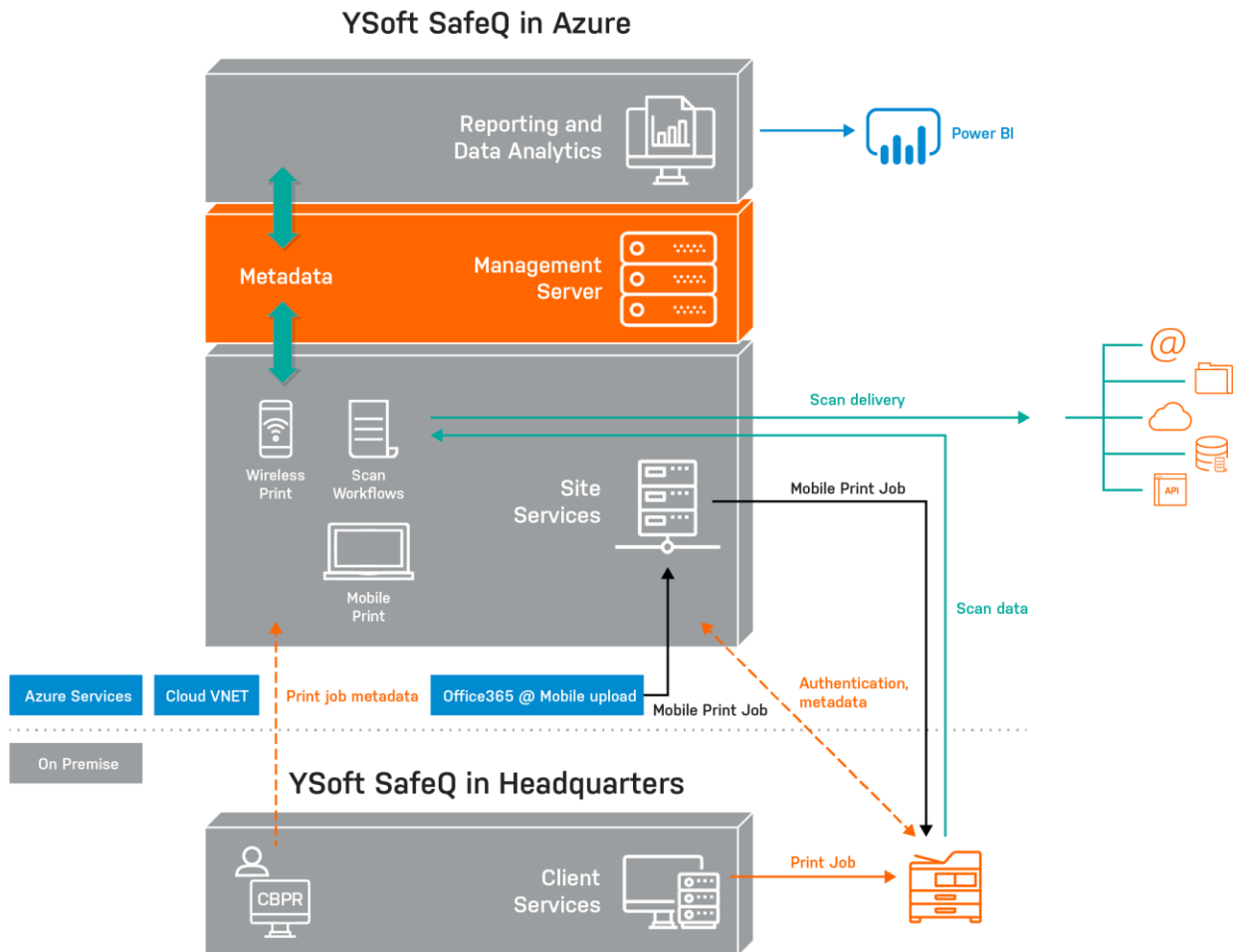
Figure 1 YSoft SafeQ 6 Single Site Location (SMBs)

Large organizations

Large organizations are typically concerned with high availability, redundancy/failover and the ability to scale print services as the company grows. In much the same way that YSoft SafeQ 6 can scale on- premise, it can also scale on Microsoft Azure. This is accomplished by Active-Active application-level clustering of the Management Server tiers and/or Site Services tiers. In Figure 2, both Site Services and Management Servers are fully redundant.

In this option, users can print using Client Based Print Roaming, server-based Print Roaming or both, for pull-printing to any printer in the YSoft SafeQ environment. Scan, print, copy and fax job metadata is collected for reporting and accounting purposes.

Like the SMB option, mobile printing is accomplished by sending an attachment to an Office 365 email address.

YSoft SafeQ 6 database support and information about a Microsoft PowerBI template is the same as in the SMB section above.
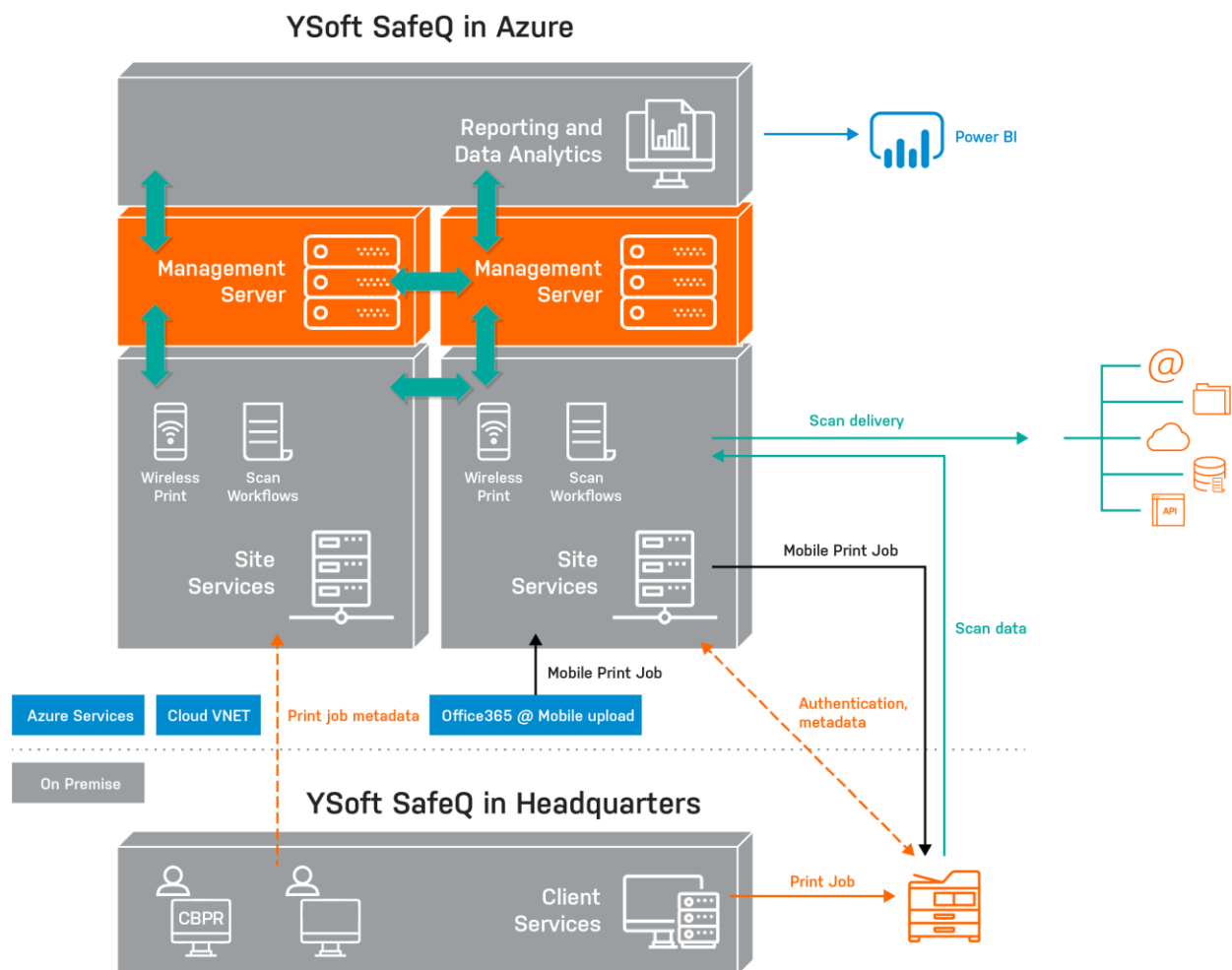

Figure 2 YSoft SafeQ 6 Single Site Location (Large Organizations)

YSoft SafeQ 6 on Microsoft Azure and on-premise

Some organizations may wish to utilize the cloud only for print job metadata collection and reporting/accounting purposes, keeping authentication and print job data onsite. In this hybrid option, the YSoft SafeQ Site Services tier is on-premise to handle the processing of the print job. Figure 3 shows the YSoft SafeQ 6 architecture in this way. This option can also cluster Management servers and/or Site Services.

With this option, users can print using Client Based Print Roaming, server-based Print Roaming or both for pull-printing to any printer in the YSoft SafeQ environment. Scan and print job meta data is collected for reporting and accounting purposes. If a connection to Microsoft Azure is lost, the local Site Services can go into offline mode where authentication and printing can still occur.

As in the previous two options, mobile printing is accomplished by sending an attachment to an Office 365 email address.

YSoft SafeQ 6 database support and information about a Microsoft PowerBI template is the same as in the SMB section above.
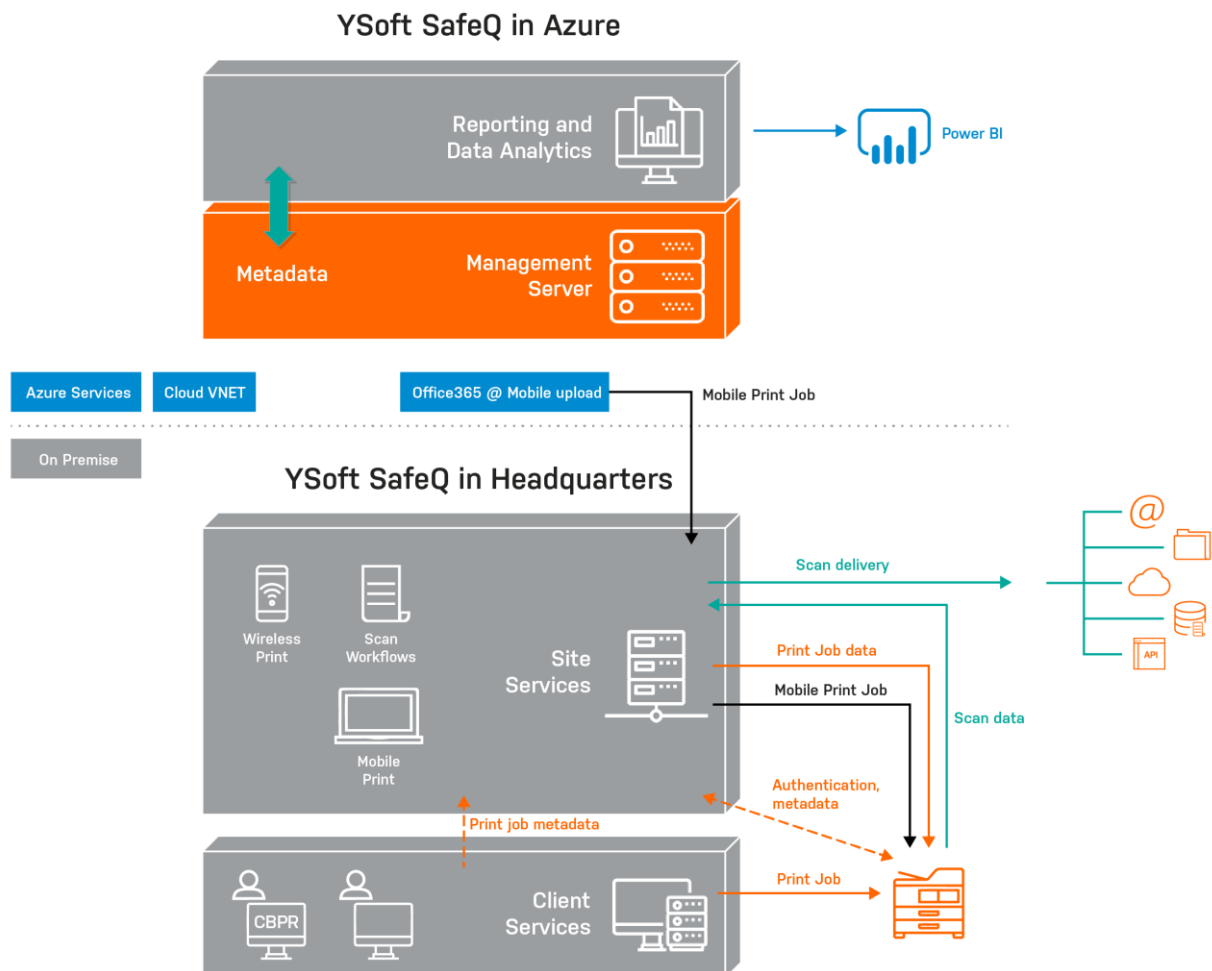
Figure 3 YSoft SafeQ on Azure and on-premise (Hybrid)

Partner Managed Service

When YSoft SafeQ 6 is deployed partially in Microsoft Azure and partially on-premise or entirely in Microsoft Azure, the opportunity exists for partners to offer management of YSoft SafeQ 6 on Microsoft Azure as a managed service. This affords a new business model for the service provider: a partner managed YSoft SafeQ service.

In this option, the customer is responsible for the management and maintenance of YSoft SafeQ Site Services located on-premise and pays a service provider to manage the YSoft SafeQ tiers on Microsoft Azure. Typically, the service provider is responsible for the cloud services costs and charges the customer for those costs and for the data bandwidth costs.

The configuration is the same as in Figure 3 and can also contain clustered Management Servers and/or Site Services.

FULL MICROSOFT AZURE AND YSOFT SAFEQ ARCHITECTURE

Now let's look at the entire YSoft SafeQ on Microsoft Azure architecture. Figure 4 shows YSoft SafeQ on Microsoft Azure with Microsoft Azure services used including virtual machines and network security group, alerts/notifications.
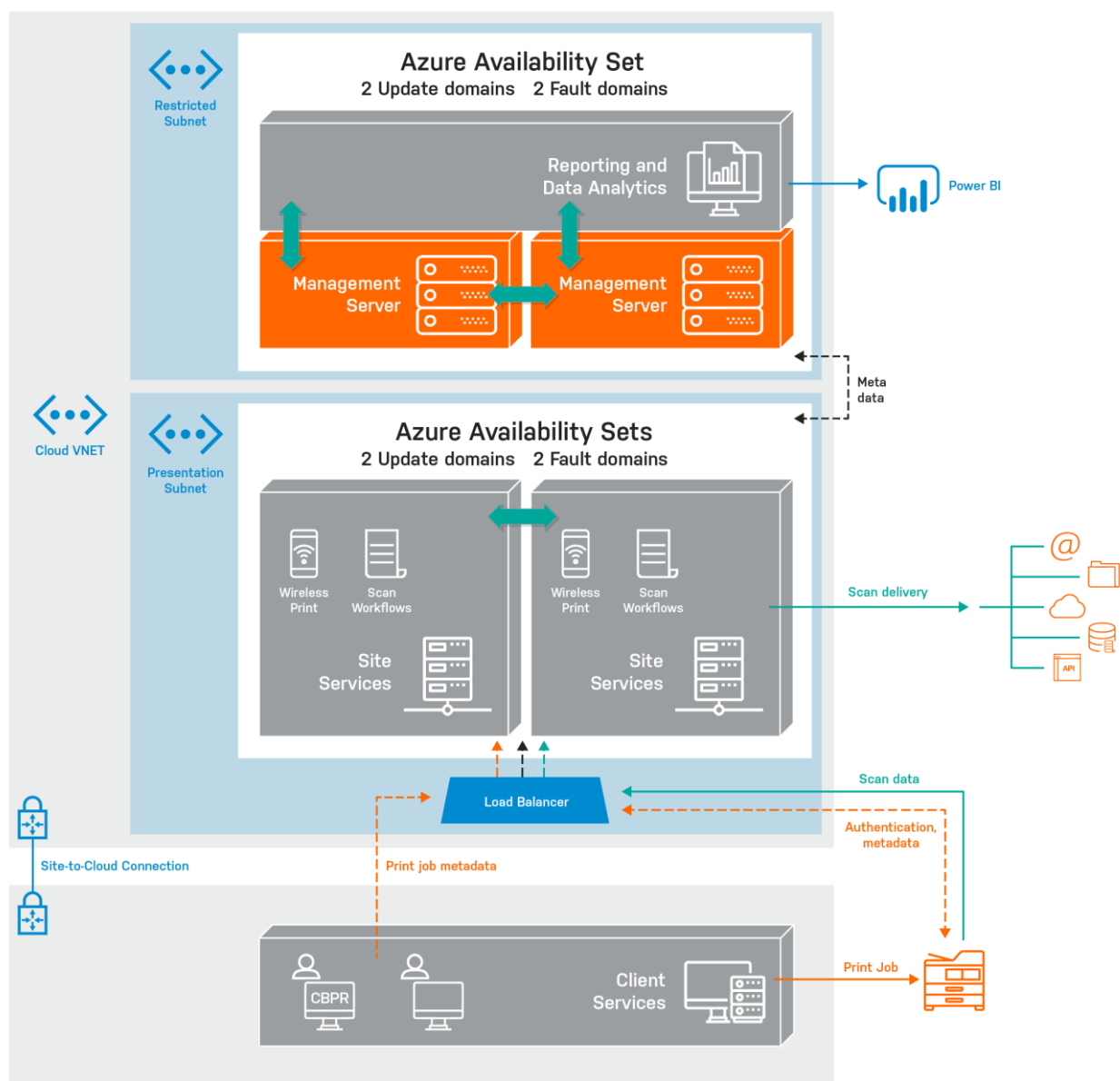

Figure 4 Azure environment with YSoft SafeQ

CLIENT BASED PRINT ROAMING (CBPR)

Client Based Print Roaming (CBPR) offers many benefits to an organization in a cloud environment. As print jobs are processed on the workstation, fewer servers are needed and this applies to the cloud as well. Keeping print jobs in a local area network also preserves bandwidth to Microsoft Azure, keeping the overall cost low.

When CBPR is used, the user should not close the workstation/laptop before the job is printed. Should the workstation/laptop be closed, the connection to Site Services is lost and the user will be notified to 'wake up' the workstation/laptop.

ADDITIONAL INFORMATION

Be sure to familiarize yourself with the following information.

Backend Integration with Microsoft Azure SQL

YSoft SafeQ 6 on Microsoft Azure supports MS SQL and PostgreSQL as well as Microsoft Azure SQL databases for the storing of internal and configuration data including print/scan/copy/fax job metadata for the purposes of reporting on user and device usage.

The flexibility of the Microsoft Azure SQL Database service allows ongoing adoption of the database's robustness and security level required as an organization grows. Y Soft support services can assist with the customer's specific requirements.

Microsoft PowerBI Template

Y Soft provides a PowerBI Template to help administrators easily export data from the YSoft SafeQ 6 Reporting module into PowerBI where the data can be further analyzed. The template accompanies this Tech Note and can be downloaded from Partner Portal.

Virtual Machines

With Microsoft Azure cloud services, organizations no longer need to purchase servers for many services. By using Microsoft Azure virtual machines with a Microsoft Windows Server operating system installed, the organization can securely connect the virtual machines to their internal network.

YSoft SafeQ supports Microsoft Azure virtual servers with these operating systems:

- Microsoft Windows Server 2008 SP2 64 bit
- Microsoft Windows Server 2008 R2 SP1 64 bit
- Microsoft Windows Server 2012 64 bit
- Microsoft Windows Server 2012 R2 64 bit
- Microsoft Windows Server 2016 64 bit

IT IS EASY TO GET STARTED

Getting started with YSoft SafeQ 6 on Microsoft Azure is simple – it is the same as on-premise. For example, all these processes are the same:

- YSoft SafeQ price list remains the same
    - Per-device pricing
    - Subscription-based model or traditional, renewable license
- Offered as software suites for the greatest price value or individual modules
- Full range of SLA level choices
- Ordering, card reader testing services

As you work with your Y Soft Regional Sales Manager on new or existing customers tenders, be sure to include the customer's desire to use Microsoft Azure cloud services. Your YSoft SafeQ solution architect can then design the right cloud option for the project.

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