Server Farm

Untrusted

Semi-Trusted

Internet Security Layer

National Network

ISP1

MPLS with QoS

Internet Routers
Primary Data Center

BGP Multi-homing

IGW

Primary Data Center

Secondary Data Center

The Primary and Secondary Data Centers are connected by Dark Optical Fiber. This allows the two geographically separate site to operate as one logical LAN.

International Network

ISP2

MPLS with QoS

Internet Routers
Primary Data Center

Inbound Internet DMZ Security Layer
(All servers in this zone run Host-based IPS)

Outlook Web Access Security Zone

Online App Security Layer

SMTP Security Layer

DNS Security Layer

SSL VPN Security Layer

Inbound Internet DMZ Security Layer Switch Primary Data Center

Inbound Internet DMZ Security Layer IPS Primary Data Center

Inbound Internet DMZ Security Layer Network Firewall Primary Data Center

Failover

1

Employee Web Security Zone

DNS Security Zone

SMTP Security Zone

Outbound Internet DMZ Security Layer Switch Primary Data Center

Outbound Internet DMZ Security Layer IPS Primary Data Center

Outbound Internet DMZ Security Layer Network Firewall Primary Data Center

Failover

Outbound Internet DMZ Security Layer Network Firewall Secondary Data Center

Outbound Internet DMZ Security Layer IPS Secondary Data Center

Outbound Internet DMZ Security Layer Switch Secondary Data Center

Employee Web Security Zone

DNS Security Zone

SMTP Security Zone

Outbound Internet DMZ Security Layer
(All servers in this zone run Host-based IPS)

1

Failover

Inbound Internet DMZ Security Layer Network Firewall Secondary Data Center

Inbound Internet DMZ Security Layer IPS Secondary Data Center

Inbound Internet DMZ Security Layer Switch Secondary Data Center

Outlook Web Access Security Zone

Online App Security Zone

SMTP Security Zone

DNS Security Zone

SSL VPN Security Zone

Inbound Internet DMZ Security Layer
(All servers in this zone run Host-based IPS)

High-End Servers

Mid-Range Servers

Stand-Alone Servers

10GE

Primary Data Center Access Switches (LAN/SAN Hybrid)

Primary Data Center Access Switches (LAN/SAN Hybrid)

Primary Data Center Access Switches (LAN/SAN Hybrid)

SAN Primary Data Center

Tape Library Primary Data Center

Primary Data Center Distribution Switch (LAN/SAN Hybrid)

2

Primary Data Center Core Switch

3

Server Farm Security Layer IPS Primary Data Center

Server Farm Security Layer Network Firewall Primary Data Center

Server Farm Security Layer Network Firewall Secondary Data Center

Server Farm Security Layer IPS Secondary Data Center

Secondary Data Center Core Switch

3

SAN Secondary Data Center

Tape Library Secondary Data Center

Secondary Data Center Distribution Switch (LAN/SAN Hybrid)

2

Secondary Data Center Access Switches (LAN/SAN Hybrid)

Secondary Data Center Access Switches (LAN/SAN Hybrid)

Secondary Data Center Access Switches (LAN/SAN Hybrid)

High-End Servers

Mid-Range Servers

Stand-Alone Servers

Server Farm Security Layer
(All priority servers in this zone run Host-based IPS,
all servers are separated in to individual funcitonal Security Zones)

Intranet DMZ Security Layer

Extranet 1 Security Zone

Extranet 2 Security Zone

App1 Security Zone

App2 Banking Security Zone

DNS Security Zone

Email Security Zone

Etc.

Intranet DMZ Switch Primary Data Center

Intranet DMZ Security Layer IPS Primary Data Center

Intranet DMZ Security Layer Network Firewall Primary Data Center

Failover

Intranet DMZ Security Layer Network Firewall Secondary Data Center

Intranet DMZ Security Layer IPS Secondary Data Center

Intranet DMZ Switch Secondary Data Center

Extranet 1 Security Zone

Extranet 2 Security Zone

App1 Security Zone

App2 Security Zone

DNS Security Zone

Email Security Zone

Etc.

Intranet Security Layer

Extranet Security Zone 1

Extranet Router 1

Extranet Leased Line 1

Trusted Partner 1

Extranet Security Zone 2

Extranet Router 2

Extranet Leased Line 2

Trusted Partner 2

Wireless Access Point

Video Conferencing VoIP Client

IP Telephone

Employee

Fax over IP

Head Office Core Router

Head Office Router Backup

Head Office Switches

MPLS with IPSec VPN

Primary Data Center Core Router

DSP1

STC (PSTN)

DDR

Branch Office Router

Branch Office Switch

Secondary Data Center Core Router

DSP2

WAN Security Zone

Data Center Switches

Employee Security Zone

Legend

Router

Application Accelerator

LAN Switch
SAN Switch

Network Firewall
Application Firewall
SSL VPN Firewall
Encryption Device

IPS
IDS

Network Cloud

DSP: Data Service Provider

Security Layer Separation

Geographic Separation

Optical Fiber

DSP: Data Service Provider

PBX

Server

Desktop

Notebook

Wireless Access Point

SAN

Tape Library

Quality Control Environment (DEV, SIT & UAT)

The Quality Control Environment is a logically separate, functional duplicate of Production. With virtualisation, Production & Quality Control run on the same physical infrastructure.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

DRAWN BY: Rene Van Den Bedem

REVISED:

FILENAME: TARGET_ARCHITECTURE_POSTER.VSD

DATE:

TITLE: Target Architecture - Infrastructure Summary Diagram

DESCRIPTION: This diagram describes the IT Architecture from the logical infrastructure perspective (Security, Network & Platform Domains).

SIZE: | FSCM NO: | DWG NO: IT Architecture Phase 2-Infrastructure Summary Diagram | REV: 1.0

SCALE: 1:1 | SHEET: 1

“TO BE” TARGET ARCHITECTURE SUMMARY DIAGRAM