Who I am

Peter Kvisthammar

§ 20 years experience with BASE24

§ Programmer Analyst at CEKAB

§ Programmer Analyst at Foreningssparbanken/Swedbank

§ Astech consultant at ACI Worldwide EMEA-region

§ CardIT since 2001

§ Worked with GoldenGate since 2004

§ Technical coordinator in Swedbank's Dualsite project since 2004

Technical

Foreningssparbanken/Swedbank

Swedbank

§ The leading bank in the Scandinavian-Baltic region

§ Established 1997 by merging
   - Sparbanken (1820/1942)
   - Foreningsbanken (1915/1956)

§ 750 offices in Sweden

§ 280 offices in the Baltic region

§ 8,5 million private customers, 431000 company customers

§ Presence in Finland, Denmark, Norway, Russia, Germany, Spain, USA, China and Japan

§ Business bank of the year 2003-2005

§ Bank of the year in Sweden 2005

Tandem Systems

Site A/Site B

- § CPU   86006   / 86004 and 88002
- § DISK   7*18, 9*36, 1*72 GB   / 7*18, 9*36, 1*72 GB
- § HSM   3 Atalla   / 3 Atalla
- § Guardian release G06.26   / G06.26

Technical

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REAL-TIME
June 12-14, 2006 Las Vegas, NV

BASE24

Swedbank's Base24

§ Release 6.0.4

§ XPNET 3.0.64

§ POS, ATM and FHM

§ 4,5 million CAF records (cards)

§ 70000 directly connected POS devices
  - 5 different Device Handlers (4 variations of SPDH)

§ No directly connected ATMs

§ Connections to Mastercard and Visa

§ 20 HISO-based interfaces (issuer, acquirer and both)

§ EMV support

BASE24 volumes

§ 70 millions transactions per month

§ Peek day 3,6 millions transactions

§ Peek TPS 150 (140 POS, 10 ATM)

SWEDBANK BASE24 DUALSITE

Business goals for Dualsite

§ Disaster recovery

§ Maintenance down time

§ Sales argument

Technical

Project directives

Project directives in descending order

§ Quality

§ Time

§ Costs

Why GoldenGate Extractor/Replicator?

§ Already used by the Atlas system

§ D24

§ GoldenGate and ACI

Project phases

§ Initial state backups

§ Hot site

§ Dual site

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Timeframes

Expected/Actual

§ Hotsite   beginning 2005   /   mid 2005

§ Dualsite   beginning 2006   /   fall 2006

Technical

Hotsite

BASE24

§ Hotsite configured but not started

GoldenGate

§ No D24 functionality used

§ Dormant extractor/replicats HOT to PROD

§ Mapping of disks

Communication

§ Switchable between PROD and HOT

Dualsite

BASE24

§ Two completely separate systems

§ Both sites running and sharing the load

§ Each system responsible for its own cutover

§ Program changes needed

GoldenGate

§ D24 functionality used

§ No disk mapping needed as disk are one to one
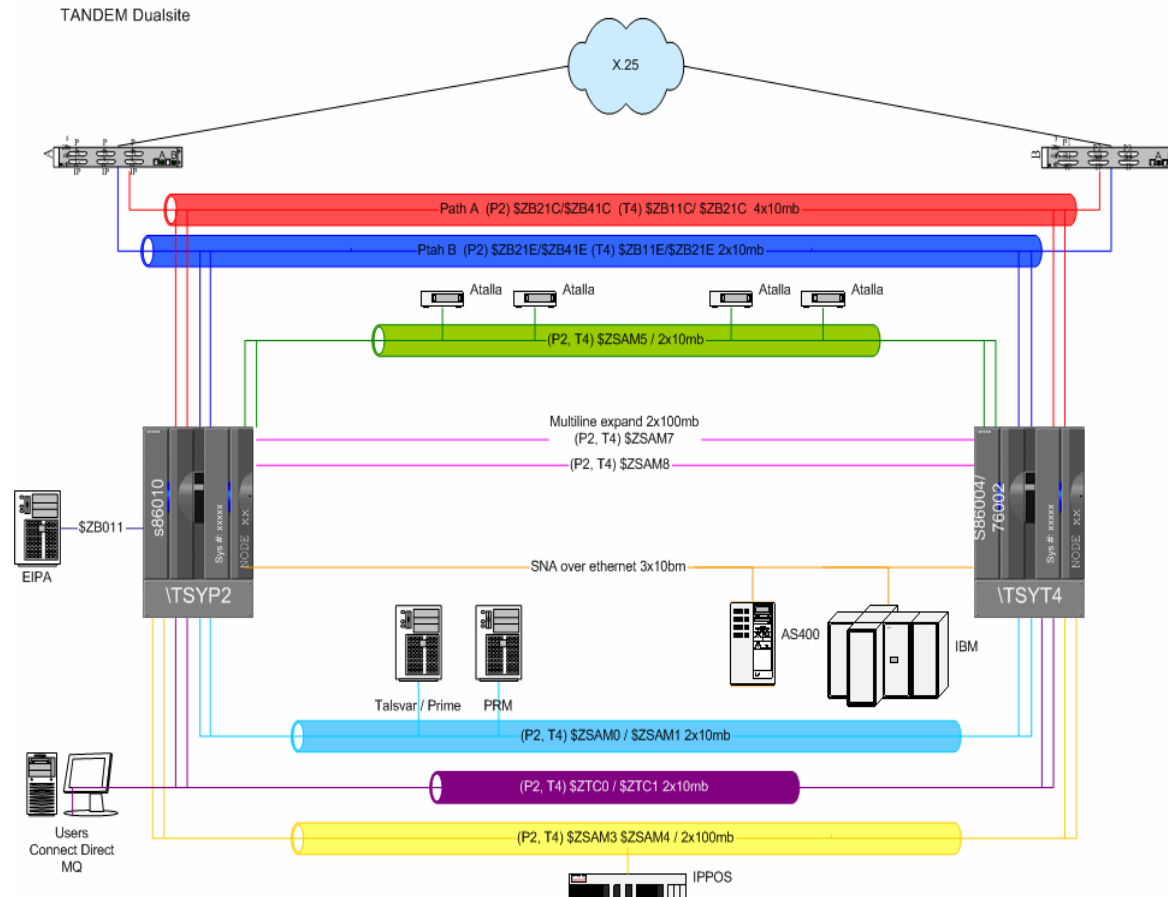
Communication

§ Divided between the two systems

§ Changes needed at external parties

Tandem system Dualsite configuration

SWEDBANK BASE24 DUALSITE

Problem areas

- § PAK/UNPAK
- § Size of system
- § Host communication
- § Reversal issue towards interchanges
- § Early user of specific features
- § Test environment
- § Non standard bank specific solutions

SWEDBANK BASE24 DUALSITE

Lessons learned

§ Phased approach

§ Disk configuration

§ New Nonstop Server

§ External parties

§ Communications harder than expected

§ License fees

Technical

SWEDBANK BASE24 DUALSITE

Thanks

- § Valero and their staff for being such nice hosts during our visit
- § Howard Bentkower for all his support and commitment

Questions