



Using Technology to Reduce Internal & External Financial Transaction Processing Costs

Jeff Wallace

Managing Partner

Greenwich Treasury Advisors

Barriers to Reducing Financial Transaction Costs

The four major barriers to reducing w/w financial transaction processing costs are now disappearing:

- Lack of universal standards = multitude of bank proprietary networks with proprietary protocols
- Lack of single instance ERP systems = inability to post to unit G/L's due to a multitude of legacy G/L's
- Lack of timely, actionable and easily useable unit treasury information = faxes, spreadsheets and sneakernets
- Lack of mature TWS capabilities in the ERP's = lack of derivative accounting, fair valuing, etc., etc.



Five Major Trends Are Coming Together

1. Increasing acceptance of worldwide financial communication standards
2. SWIFT's SCORE membership allowing corporates direct access to their worldwide bank accounts via one pipeline
3. Internet-based/ASP/SaaS treasury workstation (TWS) solutions
4. Consolidation of the treasury workstation space
5. Oracle/SAP ERP solutions steadily moving into the treasury system space



Worldwide Financial Communication Standards — 1

- XML-based ISO 20020 is now the SEPA protocol
 - This allows for additional payment/invoice information that could not be carried in traditional bank payment formats
 - EDIFACT is now obsolete non-XML technology
 - SWIFT's FileAct also accepts ISO 20020
- TWIST is slowly taking root in Europe
 - DnB recently announced sending TWIST-formatted bank transaction cost data to GE



Worldwide Financial Communication Standards — 2

SWIFT message formats (balance info, account transaction detail, payment initiation requests) are now fully understood by:

- By the major TWS system vendors
 - Relatively easy to map SWIFT messages to those TWS's that don't
- By Oracle directly
- By SAP with Microsoft's Biztalk or IBM's Websphere middleware

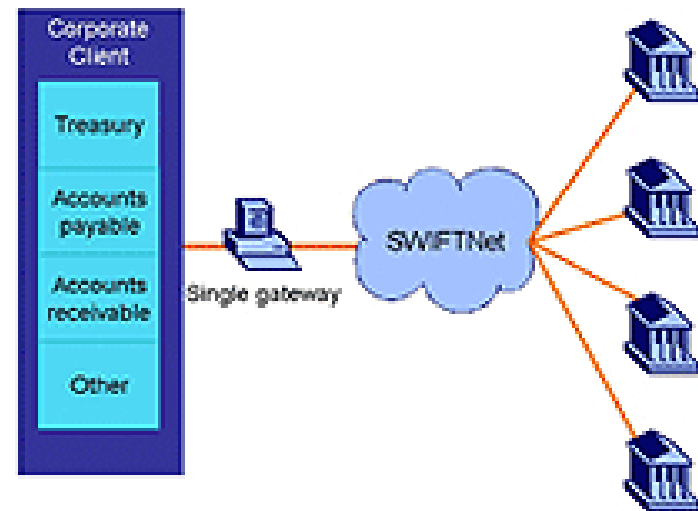
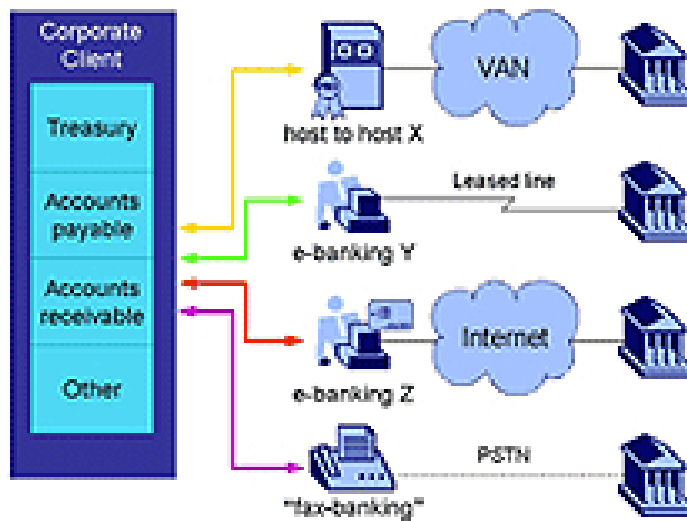


Five Major Trends Are Coming Together

1. Increasing acceptance of worldwide financial communication standards
2. **SWIFT's SCORE membership allowing corporates direct access to their worldwide bank accounts via one pipeline**
3. Internet-based/ASP/SaaS treasury workstation (TWS) solutions
4. Consolidation of the treasury workstation space
5. Oracle/SAP ERP solutions steadily moving into the treasury system space



The Opportunity: 1 Pipeline Access to all Accounts



The Benefits to Treasury

A highly reliable and secure communications platform providing corporates with independence from multiple bank reporting systems:

- Real-time visibility of their W/W cash
- Electronic disbursement files via SWIFTnet rather than via local bank hook-ups
- Real-time **Group Treasury** management of **local** cash
- Real-time consolidation of cash cross-border independent of bank pooling structures
- SWIFTnet trade confirms in FpML format



The Benefits to the Enterprise

STP between the bank transaction data to the ERP system allows the cash G/L accounts to be updated in real-time, which then allows quicker, STP re-engineering of:

- The cash application process to the A/R file
 - Improving timely customer credit management
- Payment clearing of the vendor payment file
 - Improving vendor relations
- Employee pay and benefit payment administration
 - Improving employee relations



Three Corporate Membership Models

- SCORE - Standardized CORporate Environment
 - Corporates listed on a regulated stock exchange.
 - Allow corporates to exchange messages and files with all participating banks.
 - SCORE started January 2007
- MA-CUGS - Member Administered Closed User Groups
 - Offered by banks to their customers
 - A corporate can participate in as many MA-CUGs as required
- TRCO - Treasury Counterparties
 - A non-financial can exchange FX, M/M and OTC derivative confirms with any SWIFT financial institution



Selective List of MA-CUG/SCORE Banks — 06/2007

MA-CUG Bank	SCORE	MA-CUG Bank	SCORE
ABN AMRO		ING	Yes
ANZ		JPMorgan Chase	Yes
Bank of America	Yes	PNC Bank	
BONY	Yes	Rabobank Nederland	
Barclays	Yes	RBC	Yes
BNP Paribas	Yes	Sanpaolo IMI	
Citibank	Yes	Santander	Yes
Commerzbank	Yes	Société Générale	Yes
Credit Agricole	Yes	Standard Chartered	
Credit Suisse	Yes	Sumitomo Mitsui	
Deutsche Bank	Yes	UBS	Yes
Dresdner	Yes	Wachovia	
Fortis		Wells Fargo	
HSBC	Yes	Westpac	



200 Corporate Members — 06/2007

- 30 SCORE members
 - Alcatel-Lucent, DuPont, Ford, GE, Henkel, IBM
 - Merck, Microsoft, Norsk Hydro, Renault, SAP
- 140 MA-CUG members
- 30 TRCO members
- 60% European, 20% North American



Two Ways to Access SCORE

- Build the necessary infrastructure in-house
 - T-1 lines, SWIFT and non-SWIFT software
 - One time cost ~ \$120-140K
 - Annual costs ~ \$160-180K
- Engage an SWIFT service bureau (ISP to SWIFTnet)
 - One time cost ~ \$25K
 - Annual costs, incl. telephone lines ~ \$35-45K
- Service bureau and SWIFT message unit costs
 - Annual ~ \$50-60K



Five Major Trends Are Coming Together

1. Increasing acceptance of worldwide financial communication standards
2. SWIFT's SCORE membership allowing corporates direct access to their worldwide bank accounts via one pipeline
3. **Internet-based/ASP/SaaS treasury workstation (TWS) solutions**
4. Consolidation of the treasury workstation space
5. Oracle/SAP ERP solutions steadily moving into the treasury system space



Internet-Based Solutions

- AvantGard's 10+ TWS's all have internet access and some are ASP
- WSS's Wall Street Treasury (aka Trema) has an ASP version
- FXpress' FIRST is a full-fledged ASP solution (but is not yet a full-fledged TWS)
- Reval's SaaS hedge accounting/financial instrument system
- Clearwater Analytics' SaaS investment/debt portfolio fair valuing and analysis system
- GE's in-house local unit FX hedging request/FAS 133 documenter/FXall execution/FXpress hedge accounting system
- Oracle and SAP systems are fully accessible w/w to corporate users



Benefit of Internet-Based Solutions

Whether full-fledged ASP systems or using an internet front-end interacting with in-house client/ server systems, the overall benefit is w/w 24/7 access by the foreign units to provide actionable and immediately accessible information to Group Treasury:

- FX and funding requests
- Cash flow forecasts
- Cash and debt balances



Five Major Trends Are Coming Together

1. Increasing acceptance of worldwide financial communication standards
2. SWIFT's SCORE membership allowing corporates direct access to their worldwide bank accounts via one pipeline
3. Internet-based/ASP/SaaS treasury workstation (TWS) solutions
4. **Oracle/SAP ERP solutions are steadily increasing their capabilities in the treasury system space**
5. Consolidation of the treasury workstation space



Improvement in the ERP TWS Capabilities

Both Oracle and SAP offer now:

- Improved financial instrument pricing using pricing models
- FAS 133 accounting (but only for simple hedges)
- Cash management (if you set up the rules right)
- Two-way bank file transfer capabilities
- Read/write SWIFT message formats
- Cash forecasting based upon the AR and AP subledger data



But ...

Work is definitely involved in getting the ERP systems to do typical treasury activities. Here's one treasury professional's experience with Oracle posted on an AFP Forum:

- **Cash concentration.** The Cash concentration/pooling logic is rather rudimentary and may not fully address your company's cash concentration methodology out of the box.
- **EFT methodology.** Does not have built-in ACH vs. Wire pooling logic. Everything is a transfer, and every cash flow happens on the same day. This is by far one of the most glaring shortcomings and requires customization to get the proper dating.
- **Bank Interfaces.** No built-in bank interfaces. You will need to utilize a middleware (like BizTalk) to get your BAI2 files from the bank and into the module. BAI2 files will need to be carefully reviewed to make sure Oracle is parsing them correctly.
- **Reporting.** The out-of-the-box reporting is extremely insufficient. You will be forced to develop your own custom reports for cash positioning, disbursement details, etc.
- **G/L posting and module integration.** Oracle excels here. You will be able to auto-reconcile your cash, create nice matching and GL posting rules, schedule daily posting to GL and a variety of other value added day-to-day tasks.
- **Conclusion.** Most of these shortcomings can be addressed with customization and middleware.



On the other hand ...

- A stand-alone treasury system is silo thinking
- Enterprise-wide thinking works both ways
- An ERP system is the best way to manage working capital
- Nobody ever said installing an ERP module was easy, and installing a TWS is often difficult as well
- From our conversations with them, both SAP and Oracle are aware of these difficulties
- You will see increasing improvement over the next few years



Five Major Trends Are Coming Together

1. Increasing acceptance of worldwide financial communication standards
2. SWIFT's SCORE membership allowing corporates direct access to their worldwide bank accounts via one pipeline
3. Internet-based/ASP/SaaS treasury workstation (TWS) solutions
4. Oracle/SAP ERP solutions steadily moving into the treasury system space
5. **Consolidation of the treasury workstation space**



TWS Consolidation

- We now have three major players in what was ten years ago a space of many small founder-run TWS's:
 - PE-owned SunGard's acquisition of over 10 system vendors from Quantum, Integrity, ICMS, GTM, etc., etc. is relatively old news
 - Relatively recently, the \$8 bn+ Thomson Financial Group bought out Selkirk creating Treasura
 - Recently, PE-owned Wall Street Systems (WSS) acquired Trema and Richmond Systems
- These players are large, hungry and will work hard to maintain their current competitive advantages over SAP and Oracle



SunGard Gets It

Of the three, SunGard is the smartest, fully understanding what the implications of SCORE are:

- Disintermediation of the banks' proprietary networks, which will be by 2012 as dead as CompuServe's and MCI's 1985 proprietary email services
- Replacement of bank overlay pooling structures and bank payment factories with TWS solutions
- SunGard is now offering its customers direct access to SWIFTnet via its own SWIFT service bureau



Competition is a Good Thing — 1

- WSS and Thomson will soon see the light and actively support SWIFTnet access
- From our conversations, Oracle and SAP also see the advantages of SWIFTnet access
 - Allowing **real-time** STP in the ERP of cash reconciliation, cash application and disbursement, improving their value proposition
 - Microsoft sees substantial opportunity in selling its middleware Biztalk to facilitate converting SWIFT messages for SAP (Oracle is fully SWIFT message compliant)



Competition is a Good Thing — 2

- Both the TWS and the ERP vendors now are looking hungrily at banks' share of the corporate treasury **IT** wallet
 - The hidden, large part of the overall treasury wallet
- With SCORE, bank IT services are no longer hard to duplicate
 - A pooling structure is not banking, it is IT**
- To paraphrase LendingTree, when IT vendors compete with banks on IT technology, you win



Expected Treasury Model for 2010

- One instance w/w ERP system
- An internet-accessible TWS
- SWIFTnet access through a service bureau
- ERP directly reads w/w bank transactions in real-time, with subsequent improvements in cash, AR, AP, etc.
- Automatic TWS consolidation of international EUR and USD cash, keeping local bank accounts with no pooling structures
- Automatic TWS daily cash management of all major and middle-sized foreign units
 - The key is running the disbursements through SWIFTnet
- The end of local controller control of banking, but continuing to use his local banks



About Greenwich Treasury — 1

Since 1992, Greenwich Treasury Advisors has been delivering integrated treasury solutions for over 300 global businesses:

- Risk
 - FX/IR/commodity risk assessment and policies
 - FAS 133/IAS 39 hedging and documentation
 - Performance measurement
 - Best practices
- Cash
 - Global liquidity management
 - Cross-border cash consolidation
 - Bank reviews and RFP development



About Greenwich Treasury — 2

- Structures
 - Diagnostic treasury reviews
 - Implementing spin-offs and merger treasuries
 - In-house banking and outsourcing
- Technology
 - Treasury system RFP's, review and selection
 - Treasury intranet and web application design
- For more info, visit www.greenwichtreasury.com
 - Free articles on risk management, FAS 133, treasury systems and treasury maxims at </articles.cfm>



About Greenwich Treasury — 2

- Structures
 - Diagnostic treasury reviews
 - Implementing spin-offs and merger treasuries
 - In-house banking and outsourcing
- Technology
 - Treasury system RFP's, review and selection
 - Treasury intranet and web application design
- For more info, visit www.greenwichtreasury.com
 - Free articles on risk management, FAS 133, treasury systems and treasury maxims at </articles.cfm>



Representative Clients

Alcan

Amgen

BP

CITGO

DaimlerChrysler

Dow Chemical

DuPont

EDS

General Motors

Hydro-Quebec

International Paper

McDonald's

Merck

Nestle

Novartis

NZ Dairy Board

Procter & Gamble

Saint-Gobain

Siemens

TRW Automotive



Jeff Wallace

- Founded Greenwich Treasury Advisors in 1992, and author of:
 - *The Group of 31 Report: Core Principles for Managing MNC FX Risk* (AFP, 1999)
 - *A Risk Metric Approach to Hedging* (GTA, 2002)
 - FAS 133 chapter of *The Handbook of International Finance & Accounting* (John Wiley, 2004)
- Formerly VP-International Treasury at American Express, AT at Seagram and at D&B; CPA at PW
- jeff.wallace@greenwichtreasury.com
- +1-630-566-9119



Why Clients Choose Greenwich Treasury

- Corporate Treasury Expertise
 - Each consultant brings over 25 years of **corporate** treasury experience
- Proven methodologies
 - Data gathering and analysis
- Collaborative approach
 - We work as part of your team
- Independent with no conflicts of interest
- 100% guarantee of your satisfaction
 - Or we will return your fee

