

SWIFTNET FOR THE CORPORATE TREASURER

INTRODUCTION

Over the past few years there has been a marked increase in corporate demand for SWIFT connectivity. This requirement has typically been driven by strategic initiatives such as treasury centralization, payment factories, liquidity management or e-banking projects. At the same time, a key part of SWIFT's growth strategy has been to get more corporate treasuries using SWIFTNet to communicate with multiple banking providers.

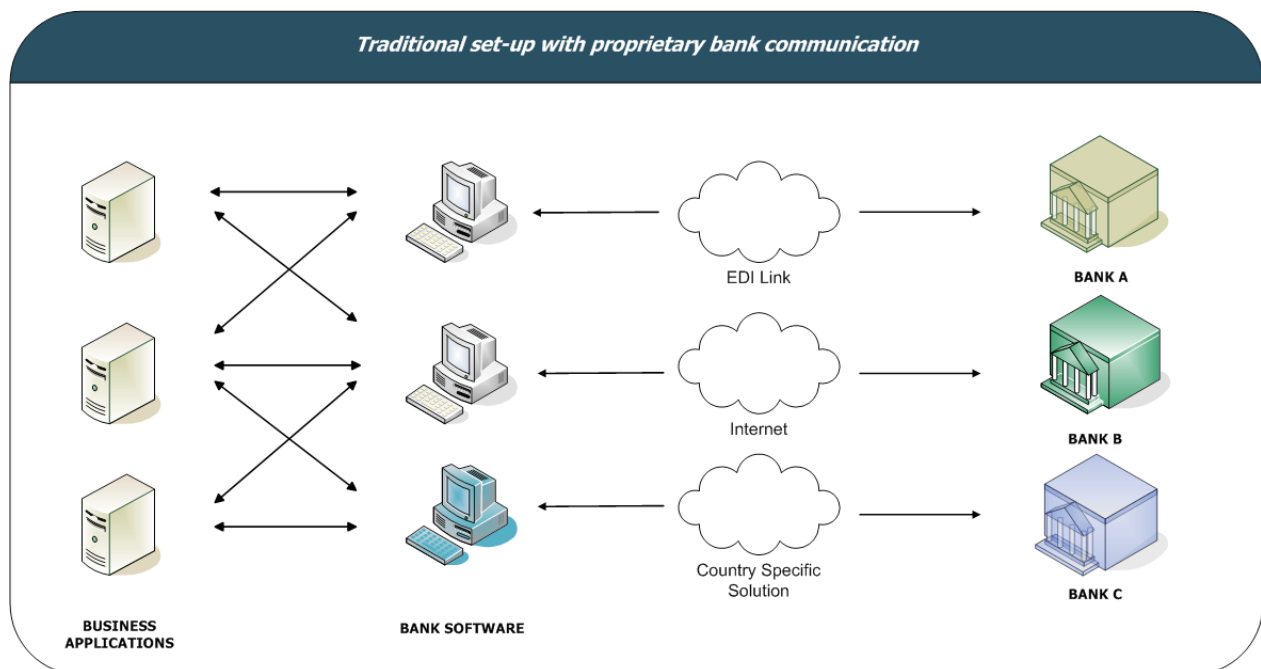
Indeed, corporate access to SWIFT is a significant development because it provides corporations with a single channel to communicate with all of their banking partners and eliminates the need for multiple channels and multiple bank workstations.

Yet those corporations joining SWIFT are looking for more than just connectivity and typically see this as part of a larger project of cost reduction, improved efficiency and visibility of funds. This White Paper highlights the opportunities that SWIFT provides for corporations, the choices that need to be made and the steps that should be taken in order to reach this broader objective.

THE CHALLENGES

One of the biggest challenges for any corporation is increasing the level of automation within their operations. Improving automation is dependent on achieving end-to-end STP and security from payment initiation through to payment execution.

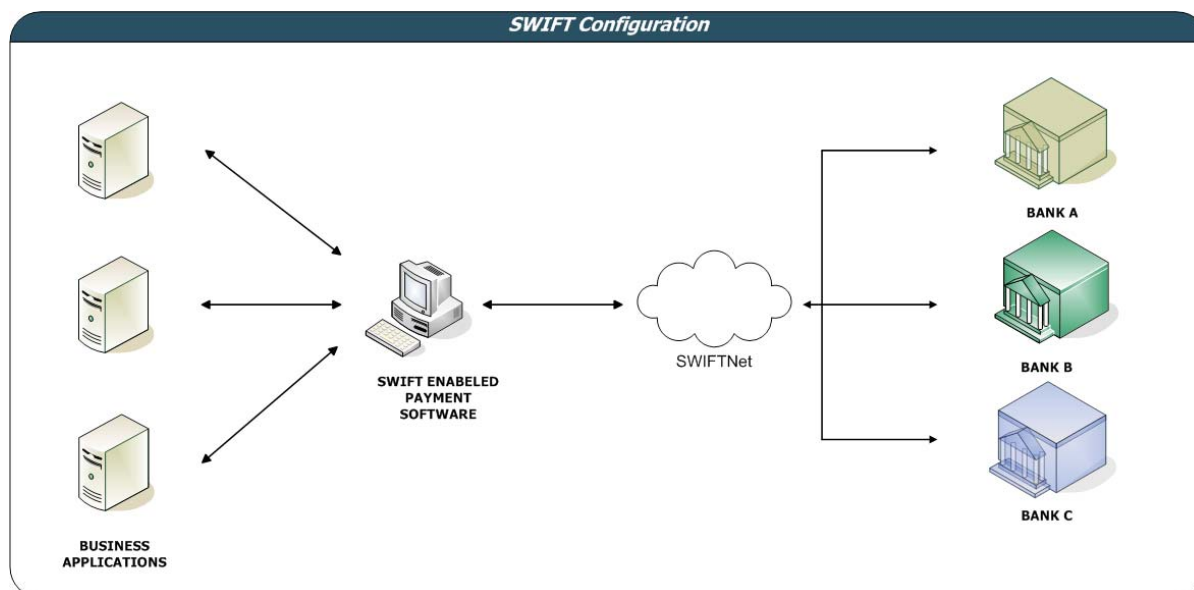
There are still two major bottlenecks preventing true STP today. First, the internal connections from corporate back-office systems, ERP and treasury systems to bank interfaces and, secondly, the interfaces between banks which lack end-to-end connectivity.



Clearly, this situation is not ideal as these environments are costly to maintain and operate. In addition, they are a source of risk because their heterogeneity is more difficult to control.

SWIFT'S RESPONSE

Concentrating these multiple connections and interfaces onto one centralized execution platform greatly simplifies the control of flows thus improving Straight Through Processing rates. Furthermore, centralizing infrastructure and making it network and bank agnostic helps reduce operational costs through a single control point. By using SWIFT as a single and secure point of access to the banking world corporations can benefit from a harmonized and standardized set-up.



In this set-up corporations are able to:

- Reduce cost and complexity by reducing the number of e-Banking platforms. Case studies and industry research indicates that each proprietary bank connection costs around 20.000 to 30.000 EUR per year, and large multinational corporations tend to have between 10-15 bank relationships.
- Select banking partners more easily. Once the initial set-up is done, minimal effort is required to add or to change counterpart.
- Increase security by protecting against internal and external fraud.
- Reduce operational risk such as the risk of service disruption and the risk of human failure.
- Comply with an ever stricter regulatory framework for example, Sarbanes Oxley).
- Improve cash and liquidity management processes. By centralizing payments and reporting from subsidiaries' financial institutions through a single channel into their main treasury center, funds visibility is improved and therefore liquidity management is enhanced.
- Benefit from the unique proposition of SWIFT in terms of guaranteed delivery and third party non-repudiation.

INTEGRATION IS KEY

In order to truly benefit from SWIFT's 'Single Window' Concept, a seamless integration between internal systems such as a Treasury Management Systems or an ERP and the SWIFT network is critical. Typically, integrating those internal applications with the proprietary infrastructure of SWIFT – using either direct or indirect connectivity via a SWIFT service bureau or Member/Concentrator – requires significant effort. Moreover very specific security requirements are often the basis for selecting SWIFT as a

In cases where the project involves integration with a single application, which typically occurs in treasury oriented SWIFTNet projects, the provider of the Treasury Management System (TMS), might be able to deliver an adaptor for connecting the application to a SWIFT gateway. Alternatively, where the vendor cannot provide an adaptor one will need to perform the integration through a third-party. If multiple applications need to interact through SWIFT, these can be integrated individually but the effort required is replicated for each of these applications.

In these situations, it is a best practice not to engage in bespoke or in-house development, but to instead select a SWIFTNet compliant software solution that acts as a central hub for connecting the distinct applications to the SWIFT infrastructure. By using such a solution secure integration can be achieved without expensive re-tooling of interfaces or application systems. Often a SWIFT project is envisaged in the context of a centralization project, in which case it is crucial to select a Payment Solution that is natively SWIFT enabled, to avoid the extra effort as set-out above.

Still, securing payment flows is not limited to implementing a secure network to manage the communication with the banks. It incorporates setting up and enforcing procedures to track and manage payment orders allowing them to be duly authorized via mandated signatories prior to release. Indeed, in a SWIFT context, it is now the corporation's responsibility to put in place tight security measures, including payment approval and signature processes. Security management is a vital component of any SWIFT connectivity project.

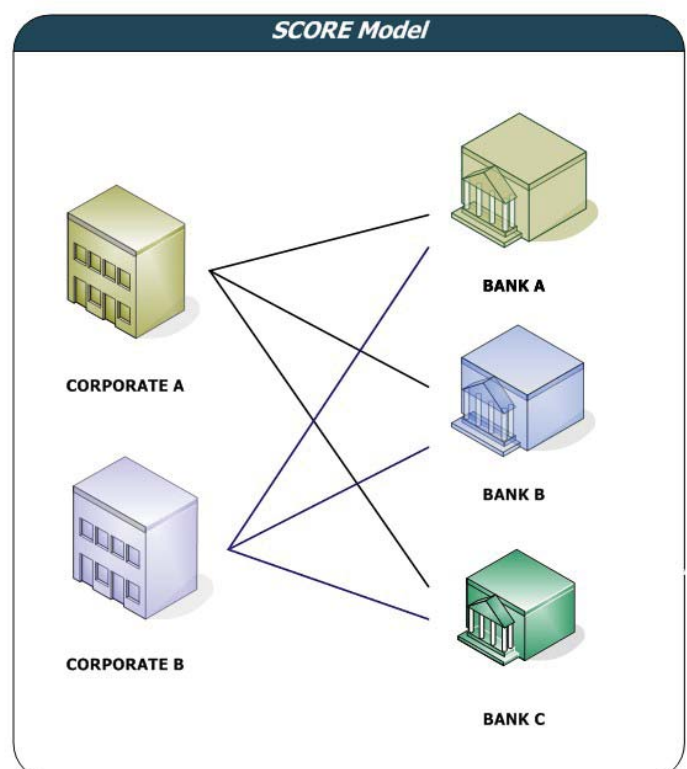
SWIFT - THE LEGAL FRAMEWORK

SWIFT foresees three possible legal frameworks for corporations who wish to use SWIFTNet as their standardized platform for exchanging messages and files with their banks. Effective 2007, SCORE became the standard participation model for corporate. Next to this model, the MA-CUG and Treasury Counterparty are two options, that can be alternatives, or complements. In this paragraph, a brief description of each of these frameworks or models is given, followed by a guideline on how to select the most appropriate model.

SCORE

SCORE (Standardized Corporate Environment), is a participation model specifically created by SWIFT to allow Corporate Participants to join and to connect to financial institutions.

Once registered to use SCORE, a financial institution can interact with any corporate that is also registered. Conversely, a corporate registered in the CUG can interact with any financial institution member of SCORE.

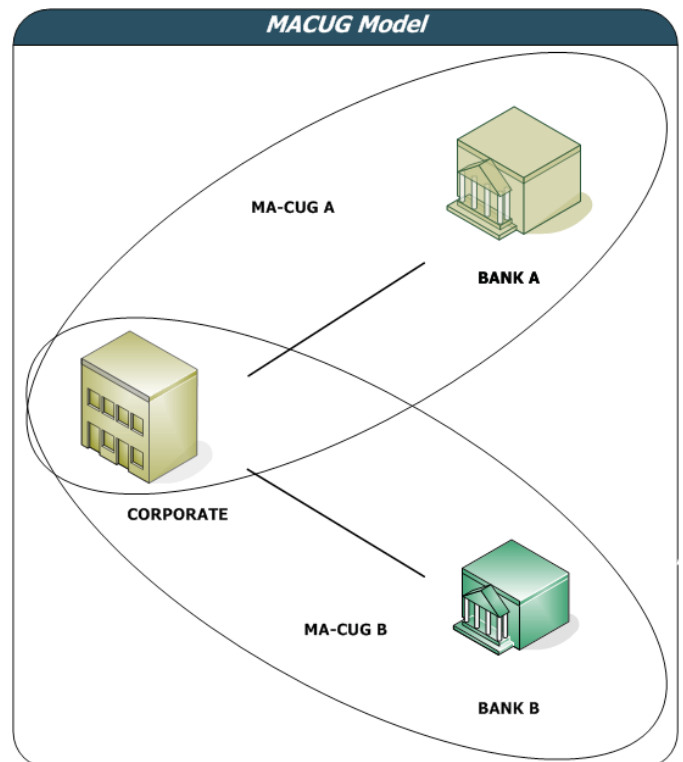


Corporations listed on a regulated stock exchange in a FATF (Financial Action Task Force) compliant member country – and to some degree also their affiliates - can join the SCORE model. Once joining the model, corporations can exchange messages and files with all participating banks. SCORE covers all of the corporations' messaging needs for treasury, cash management and securities transactions (e.g., sending commercial and treasury payments, receiving statements, selling and buying securities). On top of defining the services in the offering, SCORE also proposes standardization through clearly defined implementation guidelines. Corporation-to-corporation messaging is not allowed.

MA-CUG

Companies not eligible for the SCORE model can join through Member Administered Closed User Group (MA-CUG). In this set-up, the corporation joins via its financial institution – who manages the closed user group or CUG - and can as such only communicate with this bank. It is also the bank that decides the kinds of messages and files (payments, treasury, reporting, and securities) can be exchanged. If a corporation wishes to communicate with several banks it can register in multiple MA-CUGs, resulting in similar multi-banking capabilities as SCORE.

In this concept, the types of messages or files that can be exchanged are determined by the bank, which means the corporation has to identify these services with each bank individually. This also means that MA-CUG allows banks to offer services to their Corporate clients that are not in the portfolio defined in SCORE.



TRCO

Treasury Counterparty, or TRCO, is the oldest legal framework open to Corporates. Since 1997, the TRCO model allows corporations to exchange SWIFT FIN messages of category 3 - treasury deals confirmations (e.g., spots, forwards, currency options, money markets) - with any financial institution on SWIFT. TRCO participants can also use the matching service called SWIFTNet Accord.

The TRCO model does not cover business needs other than treasury confirmations such as e.g., sending payment instructions, receiving statements... These other activities can only be performed through SCORE or MA-CUG. On the other hand, both SCORE and MA-CUG do allow for the exchanging of treasury confirmations.

This model can be used by both listed and non-listed companies. To register in this framework, the corporation needs to be sponsored by eight financial institutions which are members of SWIFT.

WHICH MODEL TO SELECT?

	SCORE	MA-CUG	TRCO
Listed Companies			
With needs covering treasury, cash management and/or securities transactions	X		
Only wishing to exchange deal confirmations			X
With cash management needs and wishing to exchange deal confirmations with non-bank counterparties	X		X
Non-listed Companies			
With needs covering treasury, cash management and/or securities transactions			
Only wishing to exchange deal confirmations			
With cash management needs and wishing to exchange deal confirmations with non-bank counterparts			

SWIFT - THE SERVICES AVAILABLE

The services available on SWIFTNet – although standardized – strongly depend on the banks, just like the banks have a variable offering in terms of cash management. Most banks offer FIN message services, complemented by the file based exchange service called FileAct. A number of SWIFT solutions are interactive and use the InterAct protocol.

FIN

FIN is the highly standardized messaging service offered by SWIFT. FIN messages are processed and validated individually over the network and cover a broad variety of message types (payments, statements, confirmations, securities,...)

The FIN messages most commonly used in the corporate-to-bank cash management area are :

Request for Transfer	MT101
Notice to receive	MT210
Return messages	MT199 or MT195
Account Statement	MT940
Intraday Statement	MT942
Exchange confirmations for foreign exchange/interest rate/money market deals	MT3xx

FILEACT

Via the file transfer service FileAct, corporations and banks can exchange files that are not subject to the specific SWIFT formats and validation service. Indeed, FileAct is an envelope service, allowing for the transportation of any kind of information. Being a lot cheaper than the FIN messaging service, FileAct is typically used for low value, high volume payments

Typically, through FileAct banks offer their customers the ability to exchange bulk payments, direct debits and account statements in the domestic formats of the countries covered by the bank. Gradually, banks will make available via FileAct, all the services they typically have in place via their proprietary channels.

On top of using the country specific domestic formats, a number of banks also support the exchange of international formats (such as EDIFACT or FIN formats), or proprietary formats (such as SAP's iDoc) via FileAct.

INTERACT

A number of interactive "query / response" services offered by SWIFT use the InterAct protocol combined with new SWIFTStandards XML messages. This protocol is also used by SWIFTNet Accord and for new SWIFT Solutions such as Real Time Account Information and Exceptions & Investigations.

WHICH PROTOCOL TO USE?

It is important to make a clear distinction between the protocol offered by SWIFT and the formats that can be used. In the case of FIN and InterAct the protocol implies the use of the appropriate formats as defined by SWIFTStandards.

With FileAct it is possible to use non SWIFT standards over the SWIFTNet network. For example, bulk payments/collections are often formatted in the domestic standard of the country they are being sent to (such as DTA for Germany, CODA for Belgium).

Protocol	Format	Content
FIN	FIN (MTxxx)	Treasury and high value commercial payments, account, treasury deal confirmations
Domestic, other proprietary	Domestic, other proprietary	Bulk payments (such as commercial, payroll), collections, receivables, invoices

HOW TO CONNECT TO SWIFTNET

In order to connect to the SWIFTNet network, a number of steps need to be taken. If we make an abstraction of the contracts that need to be signed with the banks – which also is the case if a corporation does not use SWIFT – the following steps are essential:

The Administrative Steps

The first steps in the direction of SWIFT connectivity involve a number of steps to be taken at administrative level with SWIFT:

- Discuss your needs with your financial institutions and determine how they will be delivered over SWIFTNet.
- Choose the legal framework (SCORE, MA-CUG, TRCO).
- Fill out forms including the “SWIFT Undertaking” and the choice of BEI code.
- The application will be submitted to review by the SWIFT Board of Directors.
- Order the services one wishes to use (FIN, FileAct, Accord,...).

DIRECT OR INDIRECT?

From a technical point of view, connecting to the SWIFT network requires the availability of specific software. This software can either be purchased from SWIFT, or alternatively from a SWIFT Interface Vendor (such as e.g. SunGard’s MINT solution) can be used. On top of this software, a contract with one of the 4 approved telecom operators is required, in order to establish the physical connections with the SWIFT hub.

This software can either be installed at the corporations premises (“direct connectivity”), or the Corporate can rely on the services of a certified provider, called a SWIFT Service Bureau (“indirect connectivity”). In that case, the Service Bureau will then operate the connection to SWIFTNet and the SWIFT interface on your behalf.

The choice of the connectivity model is a crucial question, to be answered in the earliest stage of the project. Indeed, the choice will have a strong impact on the price – and as such on the business case – as well as on the necessary steps to take both from a legal as from an administrative/purchase point of view. A popular connectivity question by the corporate treasurer is: “How many transactions do I need to send to justify having a direct rather than an indirect connection?” There is no definitive answer. A bureau will typically target the small to medium users, but there is no magic cut-off point where a direct connection becomes more worthwhile. The up-front costs are typically higher with a direct connection, but the direct versus bureau decision is more often one of company philosophy and belief in outsourcing.

For many corporations, SWIFT is not a core competency and thus connectivity is often better administered by a services and technology provider that manages the day-to-day operations. This allows the corporation to outsource the management of the network and connectivity, while keeping the same benefits and level of access afforded through a direct connection.

The added benefit of a service bureau is a lower total cost of ownership, it eliminates any requirement to purchase and maintain in-house hardware or the need to deploy and support SWIFT software. A service bureau also offers a fully-redundant infrastructure, which includes disaster recovery and elimination of potential points of failure. Rather than rely on in-house administration, the service bureau offers domain expertise, with its core competency being connectivity. This includes following strict guidelines, regulations and standard set forward by SWIFT and audited on a regular basis. For this many corporations opt to use a service bureau.

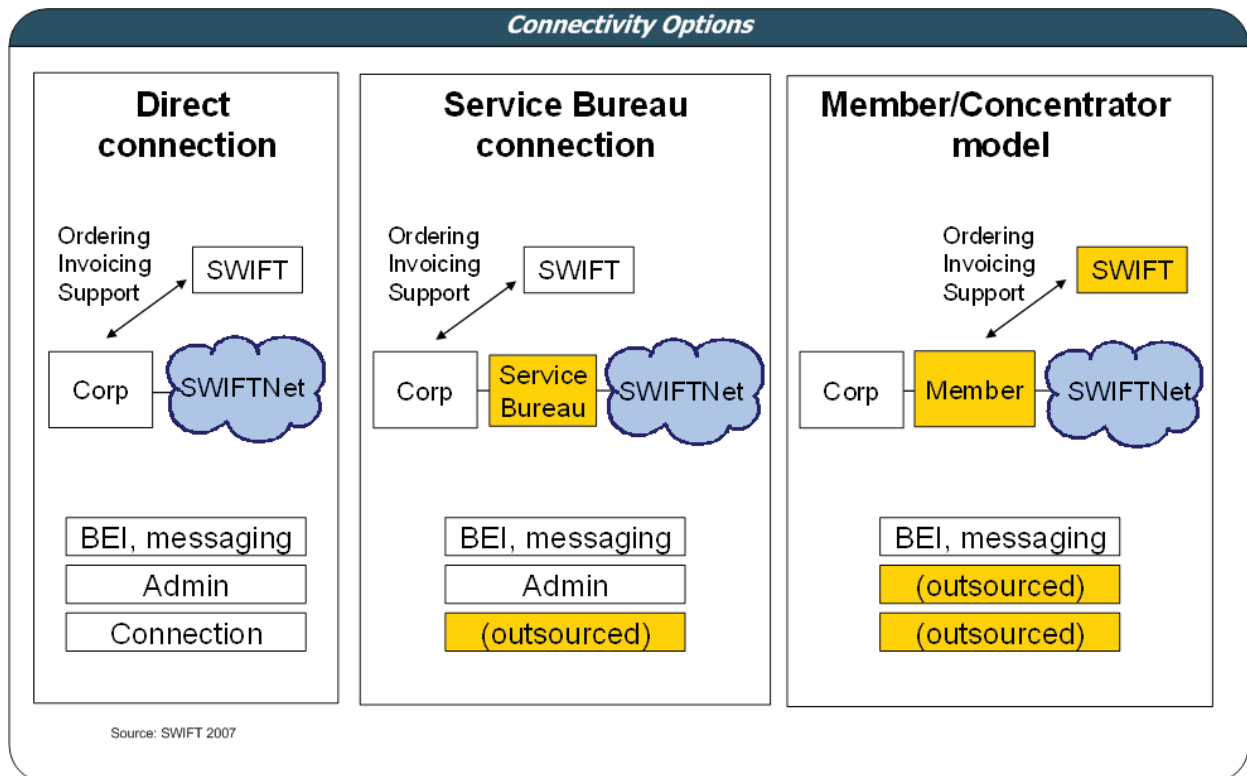
THE MEMBER CONCENTRATOR

If the choice comes to indirect connectivity, corporations can choose between a wide number of certified SWIFT Service Bureaus, strongly varying in terms of geographical coverage, size and expertise in corporate connectivity. Recently, SWIFT has created the distinction between a Third Party Service Bureau and a Member Concentrator. The latter is a service bureau ran by a full SWIFT Member, who is allowed offer a broader palette of services.

Full SWIFT Members can offer an enhanced SWIFT Service Bureau offering called the Member/Concentrator.

The technical operation is similar to a Service Bureau, but the business implementation is different as Member/Concentrators offer unique services:

- Assisting Applying
- Ordering SWIFT products and services on behalf of the Corporate
- Receiving SWIFT invoices, and integrating the costs in the overall service invoice
- Helping with basic service requests
- Using an existing communication channel establish the connection



As such, working with a Member/Concentrator as Service Bureau, strongly reduces the paperwork and the number of suppliers with whom to contract and follow-up invoicing. Just like with a traditional bureau, the corporation joins SWIFT in their own name and obtains their own eight characters BEI for addressing on SWIFT.

The use of a Member/Concentrator is particularly attractive for corporations that would rather focus on their core business instead of building costly connectivity and relying on a dedicated technical resource or domain expertise in such a small part of their operations.

BEYOND CONNECTIVITY

Corporations need to realize that using SWIFT as a single and secure point of access to the banking world is only a part of the solution and that they have to be aware of the fact that there are some barriers that they will need to overcome to achieve their goal.

One of the first elements to decide is on how to connect the internal systems to SWIFTNet. Corporations could have a separate connection to each internal system but typically most prefer to have one global hub and one global point of connectivity to SWIFT. Rather than working with multiple vendors in order to have the right SWIFT connectors and modules in place, they implement a single SWIFT-enabled payments solution. Also, in terms of maintenance, one connection makes it much easier to make any upgrade that might be imposed by SWIFT in the future.

First, one needs to ensure that the payments file is transported from the internal system to the SWIFT network in a secure way. Corporations can connect to a SWIFT interface by file transfer, which is the easiest option but this has higher security risks as this involves leaving unencrypted payment files on the network where the SWIFT software can access it, which provides the opportunity for modification. Corporations should connect through a middleware or payment solution that ensures a native connection between the Corporation's application and SWIFT and therefore incorporates the necessary security.

There is also the authorization process to consider. Payments are traditionally authorized within the electronic banking application, where the person who has the authority to approve or sign the payment provides a digital signature. On SWIFT, the corporation, rather than the bank, takes responsibility for this security requirement and also needs to install the necessary software solution.

For example, SWIFT does not provide the personal signing tokens that corporations typically receive from their bank, and part of a SWIFT implementation project will be adapting to this requirement. So corporations need to install a payment solution to handle these requirements, and while selecting one, must make sure the solution is sufficiently flexible to integrate with upcoming initiatives such as IndenTrust.

Once the security of the payments file and authorization process has been established, corporations can feel confident about meeting any audit requirements. In fact, joining SWIFT allows corporations to update and simplify their auditing procedures as part of the connectivity project.

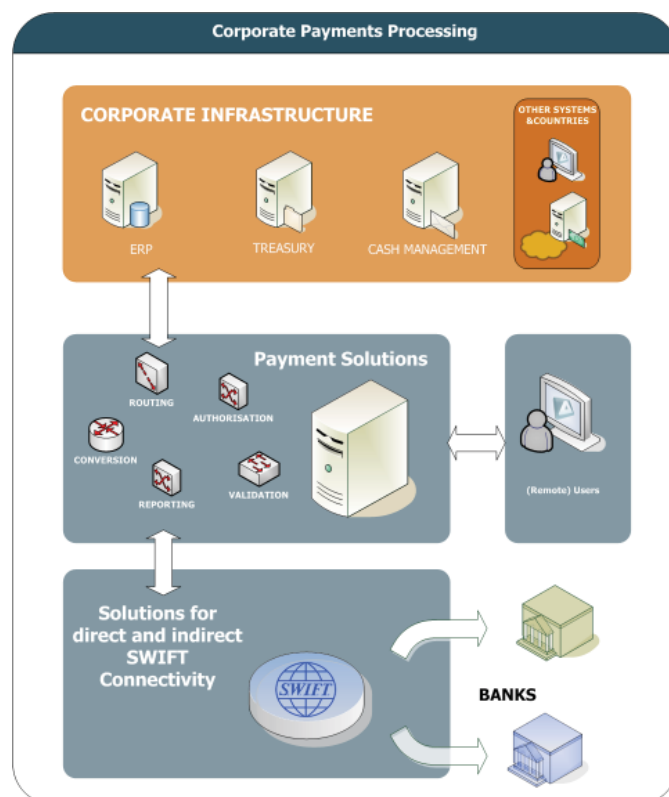
Another important issue to consider is the fact that sometimes banks will be required to use specific formats in a SWIFT context, which will replace the one used before in the legacy electronic banking application. Also standards may vary slightly from bank to bank. This leads to the question of whether corporations should change their formats within their internal applications or use a SWIFT-enabled payments solution that caters for this. An additional advantage is that such an application – provided it is SEPA-Ready – will shelter internal applications from the mandatory format changes SEPA will bring.

A TURNKEY SOLUTION

Many corporations realize that managing a SWIFTNet connection is not one of their core competencies, and that it is a function that is often better managed by a services and technology provider such as SunGard.

Having operated as a SWIFT Service Bureau for five years, and having been a full SWIFT member for the last 3 years, SunGard has now expanded its Service Bureau offering, STN for SWIFT, to give customers the ability to access the SWIFT Network via a SWIFT Member/Concentrator model. SunGard helps customers to reduce the internal infrastructure and administration costs related to the implementation and maintenance of a SWIFT connection.

The indirect access model, coupled with SunGard's existing payments processing technology, now offers customers a single solution for SWIFT connectivity.



SunGard is able to provide a unique turnkey solution to increase the level of automation within your operations and to help you reach your objectives, covering all aspects of your SWIFT project:

Connectivity Options

- Solutions for Direct Connectivity
- SWIFT Service Bureau
- Member Concentrator

Business Solutions

- ERP and TMS Integration
- Message Formatting and Conversion
- SWIFTNet Treasury Management Systems
- SWIFTNet Ready Payment Solutions

Hosting Services

www.sungard.com/avantgard

ABOUT SUNGARD AVANTGARD

SunGard's AvantGard provides real-time visibility into cash flows and increased operational controls around treasury, receivables, and payments management. Customers turn to AvantGard to help them improve management of working capital, mitigate risk, and strengthen internal controls for regulatory compliance.

The AvantGard solution aggregates data for a single view of cash, drives productivity through automation, fosters enterprise wide collaboration, and facilitates connectivity between the ecosystem of suppliers, buyers, banks, trading partners, and customers.

Offering Best Practices and Subject Matter Expertise

Drawing on the experience and best practices gained from supporting over 20,000 users worldwide, AvantGard offers more than just technology. AvantGard offers ongoing support services and process consulting from Subject Matter Experts to help maximize return on investment of time, capital, and resources.

AvantGard customers have demonstrated significant bottom line results such as improved management of cash, reduced risk, increased cash flow, and lower operating costs.

Visit www.sungard.com/avantgard to learn more.

SUNGARD AvantGard ■ email: avantgardinfo@sungard.com ■ www.sungard.com/avantgard