(ops)logix

S.W.I.F.T. MANAGEMENT PACK

WHITE PAPER

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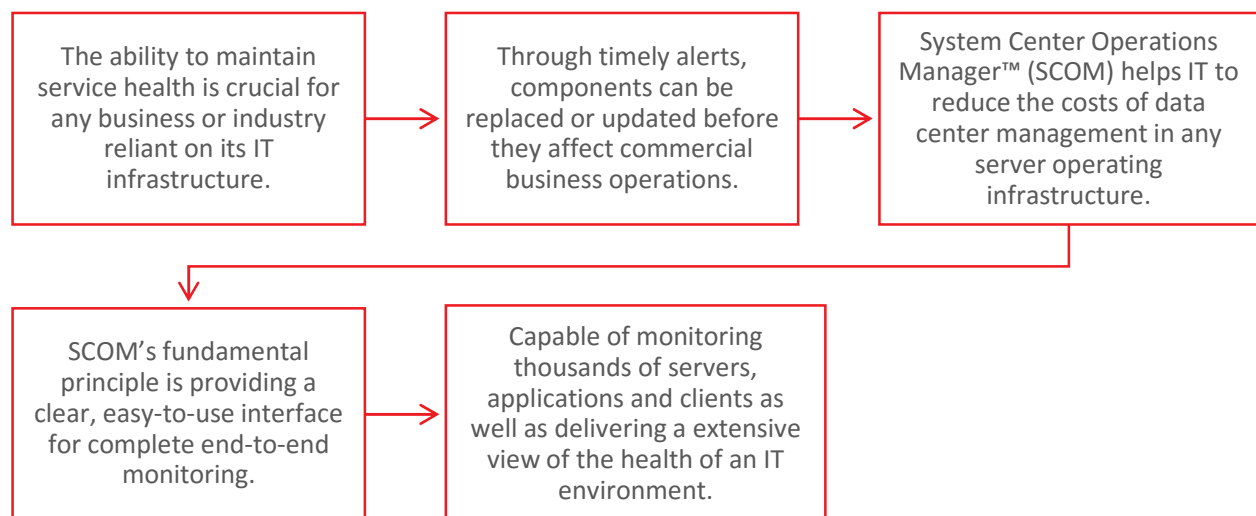
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"Centralize the monitoring of your SWIFT environment"

The OpsLogix SWIFT Management Pack provides a solution to monitoring the SWIFT Alliance Gateway and Alliance Access within Microsoft® System Center Operations Manager™. This white paper discusses how the OpsLogix SWIFT Management Pack can centralize and optimize the SWIFT server monitoring for the System Center Operations Manager environment.

1. INTRODUCTION

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) operates a worldwide financial messaging network that exchanges messages between banks and other financial institutions. The majority of international interbank messages use the SWIFT network. With over 10,500 clients in 215 countries it is the trusted means of relaying millions of financial messages everyday.

System Center Operations Manager™ (SCOM) provides the opportunity to use a single interface to monitor your IT environment. The OpsLogix SWIFT Management Pack's (MP) key feature is integrating the monitoring of the SWIFT Alliance Gateway (SAG) and Alliance Access (SAA) into System Center Operations Manager.

The ability to maintain service health is crucial for any business or industry reliant on its IT infrastructure.	Through timely alerts, components can be replaced or updated before they affect commercial business operations.	System Center Operations Manager™ (SCOM) helps IT to reduce the costs of data center management in any server operating infrastructure.
SCOM's fundamental principle is providing a clear, easy-to-use interface for complete end-to-end monitoring.	Capable of monitoring thousands of servers, applications and clients as well as delivering a extensive view of the health of an IT environment.	

The OpsLogix SWIFT MP provides the solution to monitoring the SAG and SAA within Microsoft SCOM. The SWIFT MP integrates seamlessly with a readily available platform within an IT organization.

2. SWIFT COMMUNITY

This white paper is written for policy makers, IT managers and IT administrators who work for any company with an IT infrastructure. A prerequisite for this MP is that the company uses both SWIFT software and System Center Operations Manager (SCOM).

1. System Centre Operations Manager 2007 R2 or 2012	2. SWIFT Alliance Gateway; SWIFT Alliance Access	3. OpsLogix MP for SWIFT. Compatible with SWIFT V6 and V7

3. LEGAL COMPLIANCE AND SECURITY

All OpsLogix products are developed with the same standard security policies that are dictated to Microsoft and are in compliance with the (USA) Federal Cyber Security policy. Additionally, OpsLogix products use FIPS (Federal Information Processing Standard) compliant encryption in all of its Management Packs. The OpsLogix SWIFT MP meets the requirements defined by CMMI and the Basel Accords.

4. OPSLOGIX SWIFT MP

The OpsLogix SWIFT MP lets administrators monitor the SWIFT environment through a SCOM console.

The OpsLogix SWIFT Management Pack contains best practice knowledge to discover, monitor, troubleshoot, report on, and help resolve problems for SWIFT components. OpsLogix best practice knowledge comes from our development partner which is a top 100 SWIFT user and has therefore set an absolute standard for the development of this solution.

The MP is compatible with SWIFT versions V6 and V7.

5. FUNCTIONAL SOLUTION

This solution is aimed toward streamlining the monitoring of any IT environment containing SWIFT components. It provides administrators with a central overview of all IT components in their environment, including all SWIFT components within the SCOM console. This increases user efficiency by further centralizing clear monitoring data through an available platform. This also adds to IT security, because there is no need to further extend the network and does not require engaging external partners. The OpsLogix SWIFT MP effectively becomes part of your own IT ecosystem.

The foundations of SCOM were laid over a decade ago and in 2007, SCOM became a reality in the IT sector. With its powerful and versatile monitoring options, SCOM has become an industry favorite across the globe.

Operations Manager enables users to view a list of alerts. An administrator role is needed to install agents, configure monitored computers, grant user rights and create management packs.

Administrators and designers already working with SCOM will be familiar with the applications and systems. Users will be presented with concise data on a known interface in the customizable order they are used to. The OpsLogix SWIFT MP makes use of a Full Class Model for collecting state and alert information. Both state and alert information are collected and presented.

If a Microsoft Operations Manager systems specialist were to be teamed with a SWIFT certified specialist(s) the pack will directly assist in implementing an exceptionally tight IT administrator security grid. This can contribute towards optimizing the resource infrastructure engineers and specialists have to spend in maintaining the overall IT system health and stability.
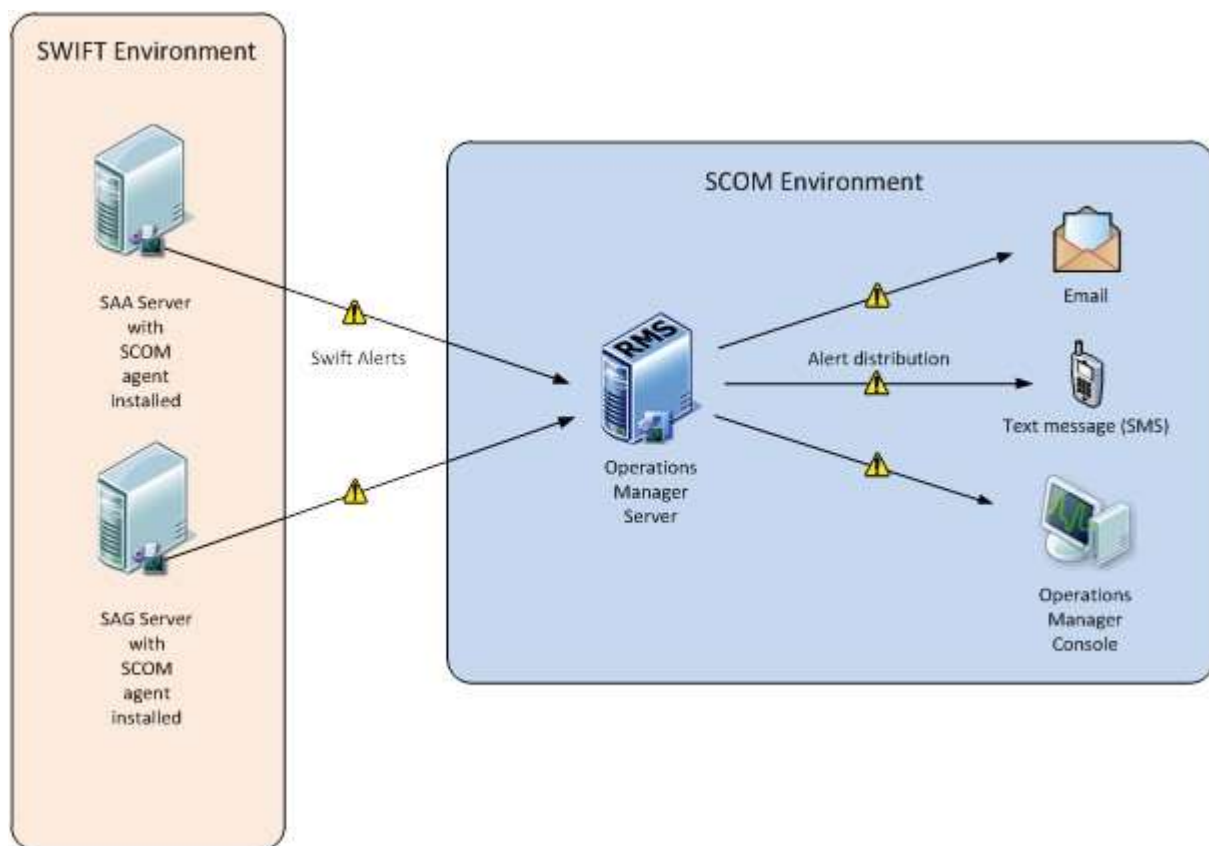

6. TECHNICAL SOLUTION

The OpsLogix SWIFT Management Pack is an effective tool that amplifies the monitoring capabilities of SCOM and extends this to a SWIFT environment.

SWIFT does not transfer funds; it enables payment orders which are then settled through the corresponding accounts of the transacting institutions. This is done through SWIFTNet® as a client-server protocol. In order for the exchange of messages to occur successfully, both client and server

http://www.opslogix.com/swift-management-pack

must be connected to the network. Should a SWIFT component fail the process would inevitably cause the enterprise a financial loss.

The MP checks the status of the Windows services for SWIFT and collects SWIFT diagnostic messages for usage in a SCOM infrastructure. Collected SWIFT diagnostic messages include: Fatal, Critical, Warning and Information messages from all possible SWIFT components.
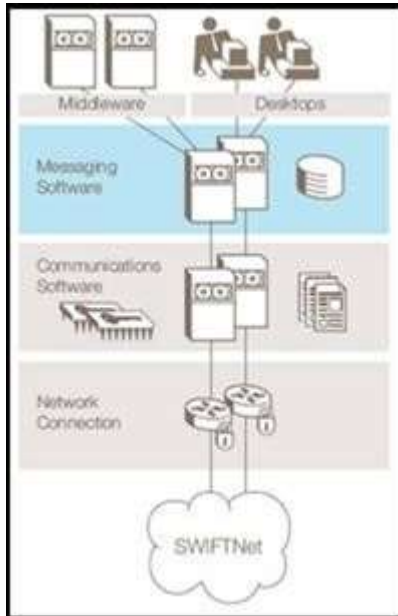

The OpsLogix Management pack for SWIFT makes use of a Full Class Model for collecting State and Alert information. Both State and Alert information are collected and presented through the same model within the Operations Manager Console so that administrators are able to view the health of their SWIFT environment instantly.
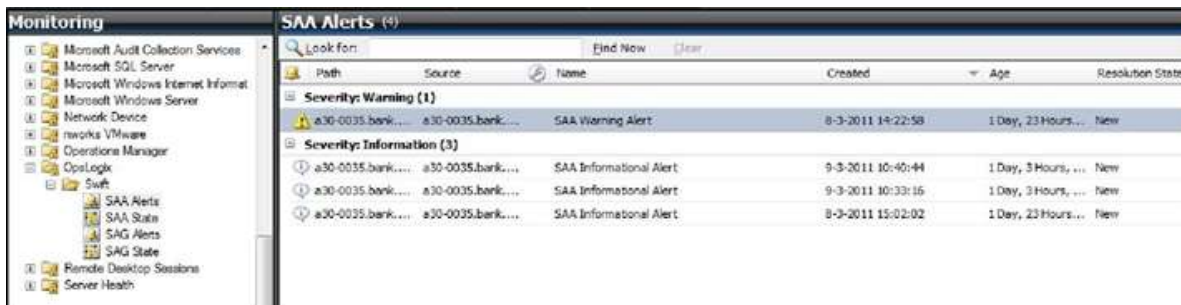

Both SWIFT SAG and SAA servers are able to send selected alerts to a specific destination. Usually alerts are forwarded to a SWIFT monitoring console. However, alerts can also be forwarded to other systems in different formats.

The OpsLogix MP leverages the ability of SWIFT to forward alerts in other formats and enables the SAG and SAA servers to forward SWIFT alerts to its locally installed SCOM agent. By default, SWIFT alerts are incompatible with SCOM alerts, therefore the OpsLogix MP translates SWIFT formatted alerts to native SCOM formatted alerts. Once the translation has been completed the SCOM agent forwards the alert to an Operations Manager management server which collects, stores and distributes alerts.

The following is an example based on the transaction of a marketable U.S. government debt security:
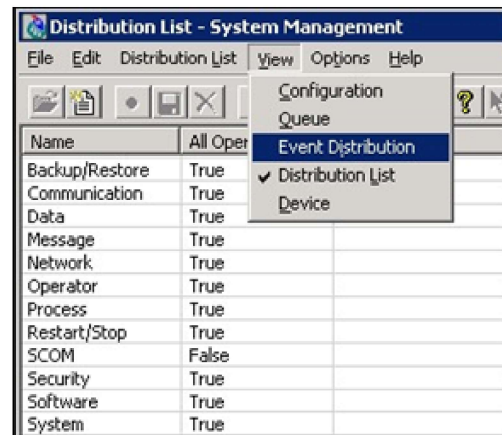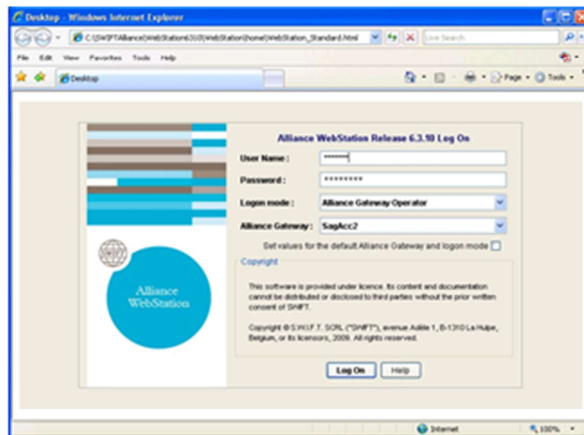
Configuration is straightforward and personally customizable to insure that enterprises can set their own standards, degrees and policies of alerts within Operations Manager.
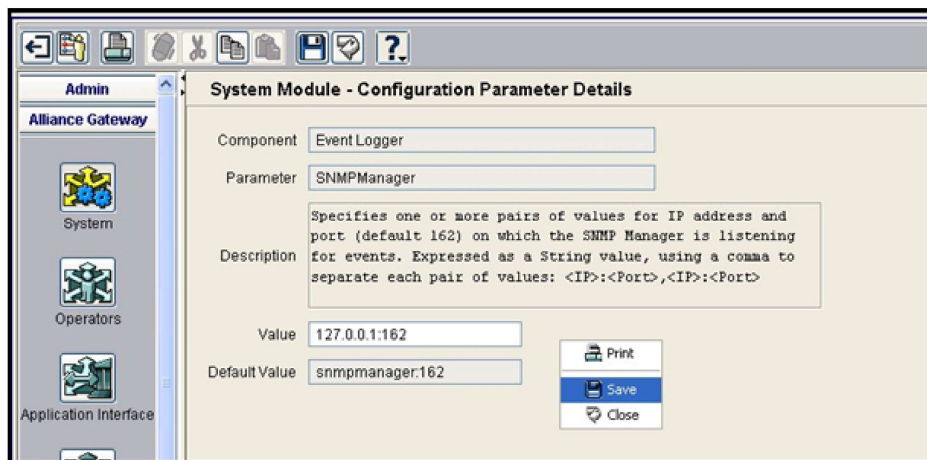
A purchase of $25,000,000 Treasury notes (6%) with a net due of $24,100,000 at a Fed fund rate of 5.95%.

If the SWIFT connection fails, this transaction would entail the following costs:

- One day $3,983.19
- Over a weekend (3 days) $11,949.58
- Over a holiday weekend (4 days) $15,932.77

7. WHAT ARE THE BENEFITS OF USING OPSLOGIX?

Optimize IT

- Simplification is one of the pillars in optimizing an IT organization, by using a readily available and familiar platform there is no need to extend the IT environment. Using this central point of control provides the ability to detect and more importantly, resolve issues as quickly as possible.

Decrease operational risk

- By using a readily available platform IT security is guaranteed and monitoring your key components for SWIFT within System Center Operations Manager adds to decreasing operational risk. Financial institutions that measure and manage their operational risk are able to reduce volatility in earnings and reduce the likelihood of an operational event becoming a capital event.

Meet compliance requirements

- There is an increasing amount of legalization and standards will have to be met by the IT organization today and in the coming years. The OpsLogix SWIFT Management Pack meet all CMMI and Basel I and II ** requirements. ** OpsLogix SWIFT Management Pack is in compliance with (USA) Federal Cyber Security policy. FIPS encryption in all OpsLogix products reduces the data security risk factor.

Reduce costs

- The OpsLogix VMware Management Pack directly contributes to reducing costs by centralizing the monitoring of a VMware environment through an already established platform. The OpsLogix VMware MP facilitates the management and operations of a virtual environment by adding further insight into the state and health of its virtual components. Knowing what level of service a business needs and identifying how this can be supported in the most cost effective way is of immeasurable importance to any serious enterprise.

• Capability Maturity Model Integration (CMMI) is a process improvement method whose aim is to guide organizations on improving their performance. CMMI has 5 defined levels and a system connected with SWIFT requires at least CMMI Level 3. The OpsLogix SWIFT MP complies with this standard.

• The Basel Accords (I, II and III) are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. The OpsLogix Management Pack directly contributes in avoiding Business Disruption and Systems Failure of the event type categories of Basel I and II.

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8. CASE STUDY

To monitor multiple SWIFT components in a System Center Operations Manager environment.

As a European specialist in wholesale securities services, an independent bank that connects financial institutions both within Europe and across the globe and serves pension funds, insurers, asset managers, banks, brokers, and investment companies from offices in Amsterdam, London, and Wiesbaden, KAS BANK are very aware of the need to understand exactly what a given set of data means.

To KAS BANK, a top 100 SWIFT user, transparent compliance regulations are mandatory. With this in mind KAS BANK teamed up with OpsLogix and together they invested in building a SWIFT Management Pack to actualize monitoring of SWIFT components, including SWIFT Alliance Gateway and Alliance Access, within System Center Operations Manager.

Ronald den Oudendammer, SWIFT Administrator at KAS BANK and responsible for the daily regulation and monitoring of KAS BANK's SWIFT messages, experienced the following:

"By using the SWIFT MP we are able to monitor multiple SWIFT Alliance Access components and SWIFT Alliance Gateway components in one single (System Center Operations Manager) monitoring product. This enables KAS BANK to detect issues instantly and resulting in quicker response times."

On the processes of monitoring, reacting and forwarding alerts, he concluded with:

"Within the SWIFT applications it is rather simple to decide to which level we want to be informed without changing anything in the SWIFT Management Pack itself."

When design and implementation was complete, Pim van der Horst, Managing Partner Addition Knowledge House™ and former CIO KAS BANK, added the following:

"SWIFT is the lifeline for financial institutions. Payments, securities transactions and statement of accounts between financial institutions are all done through SWIFT. Problems and Incidents with SWIFT can cause major losses to a financial institution. Therefore it is of the utmost importance that any malfunction of the system can be prevented and detected as soon as possible. In a

Microsoft environment SWIFT can be integrated in the Microsoft® Monitoring Tool SCOM. With the OpsLogix SWIFT Management Pack this can be realized in a short time frame and at low costs. In this way operational losses can be reduced to a minimum. OpsLogix makes our reality in terms of challenges, a reality in terms of solutions."

9. CONCLUSION

The OpsLogix SWIFT Management Pack is a software solution that successfully bridges the two IT environments for the financial sector. Its key feature is in augmenting an existing System Center Operations Manager infrastructure to centralize SWIFT alerts while maintaining system security.