OPTEVIEW RESOLVE

The Diebold Nixdorf OpteView® ResolveSM Service is a solution for ATM status monitoring, notification, dispatching, remote service and business intelligence reporting. It enables improved ATM up-time by immediately reacting to ATM statuses by electronically notifying, dispatching and tracking Maintenance service calls and notifying Cash service calls during contracted service hours. A direct communication flow is established between the ATM and Diebold Nixdorf and data is transmitted over the recommended standard secure private connection, and is encrypted via SSL protocol (note: other options are available for status delivery which may not be SSL encrypted).   Client can control remote access to their ATMs as well as have complete visibility into actions taken remotely on their ATMs through the Policy Management tool.

MINIMUM REQUIREMENTS

a.   Diebold Nixdorf SecondLine Service Maintenance Contract

b.   Opteva, IX or I-Series ATM Hardware

c.   Windows based Operating System

   - Windows 2000 minimum SP3, Windows Server 2003, Windows XP minimum SP2, Windows 7

d.   TCP/IP Communication at the ATM with connectivity to Internet

   - The authorization host connectivity does not need to be TCP/IP
   - UDP available for SNMP

e.   For ATMs that communicate with Client's internal network, ATMs must be able to communicate via TCP/IP across the Client's local area network to the Policy Manager Application on the Client provided workstation or server (usually over 1024 or higher) & resolve to DNS names of opteview.Diebold Nixdorf.com, opteviewgas.Diebold Nixdorf.com, and opteviewgasi.Diebold Nixdorf.com (SSL encrypted port 443) for the remote access agent (note: other options are available for status delivery which may not be SSL encrypted).

   - DNS is the preferred method for the ATM to resolve the names by communicating with a Cleint's internal DNS server. Alternatively, the Client can utilize DNS servers or look up names in a local host file on the ATM.

f.   EMS Remote Notifier agent software, FAN agent, or SNMP for XFS (and terminal application) agents are required, when the ATMs are going to communicate ATM statuses directly to Diebold Nixdorf's OpteView® ResolveSM Enterprise Server.

HOW IT WORKS

a.   Diebold Nixdorf's OpteView® ResolveSM System will receive ATM status messages

   - From ATMs
   - From a transaction processing host – Requires certified host interface to OpteView® ResolveSM

   b.   Statuses / Terminal faults are divided into four (4) categories: Cash, First Line and Second Line ATM Faults, and ATM SkimmingAlert (ASD). Once a status message is received, Diebold Nixdorf will perform the following tasks by category:

   - Open an Incident (all categories)

- Each automated communication and contracted service activity is tracked as the service call progresses until it is closed, which occurs when the ATM is repaired and placed back in service or for ATM SkimmingAlert for OpteView Resolve, when an "alarm reset" event is received.   Diebold Nixdorf does not dispatch service technicians for cash and ASD incidents.

- Cash faults
  - Notify up to three (3) email contacts per ATM per escalation level
    - Provides up to three (3) escalation levels per ATM
  - Notifications available via email and Interactive Voice Response ("IVR")
    - Client can designate notification hours per contact
    - Email can be sent in a text message format to mobile phones
    - Retries for email are only done if the emails are not handed off to the email server correctly
    - Email includes a notification when the incident closes in OpteView® ResolveSM
    - IVR notifications can have hours defined
    - Retries for IVR calls are done if no single contact at a given escalation level acknowledges the call (For instance, if there are three contacts only one has to acknowledge the call for the system to consider it successful)
    - IVR does not include a notification when the incident closes in OpteView® ResolveSM

- First Line ATM faults
  - Dispatch of Diebold Nixdorf technician when terminal has corresponding Diebold Nixdorf First Line on-site service contract
    - Dispatches occur 24 hours (dependent upon DECAL availability)
    - If the dispatch occurs outside of contract hours the call is scheduled for the beginning of the next set of contract hours
  - Notify up to three (3) email contacts per escalation level
    - Provides up to three (3) escalation levels
  - Notifications available via email and IVR
    - Client can designate notification hours per contact
    - Email can be sent in a text message format to mobile phones
    - Retries for email are only done if the emails are not handed off to the email server correctly
    - Email includes a notification when the incident closes in OpteView® ResolveSM
    - IVR notifications can have hours defined
    - Retries for IVR calls are done if no single contact at a given escalation level acknowledges the call (For instance, if there are three contacts only one has to acknowledge the call for the system to consider it successful.)
    - IVR does not include a notification when the incident closes in OpteView® ResolveSM

- Second Line ATM faults
  - Dispatch of Diebold Nixdorf technician when terminal has corresponding on-site service contract. If Client does not have a Diebold Nixdorf First Line contract, then notification will be to Client's First Line provider who will be responsible for contacting Diebold Nixdorf to arrange with the Diebold Nixdorf Second Line technician the time for the two parties to meet at the terminal.
    - Dispatches occur 24 hours (dependent upon DECAL availability)
    - If the dispatch occurs outside of contract hours the call is scheduled for the beginning of the next set of contract hours
  - Notify up to three (3) email contacts per escalation level
    - Provides up to three (3) escalation levels

- Notifications available via email and IVR
  - Client can designate notification hours per contact
  - Email can be sent in a text message format to mobile phones
  - Retries for email are only done if the emails are not handed off to the email server correctly
  - Email includes a notification when the incident closes in OpteView® ResolveSM
  - IVR notifications can have hours defined
  - Retries for IVR calls are done if no single contact at a given escalation level acknowledges the call (For instance, if there are three contacts only one has to acknowledge the call for the system to consider it successful.)
  - IVR does not include a notification when the incident closes in OpteView® ResolveSM

- ASD faults
  - Notify up to three (3) email contacts per ATM per escalation level
    - Provides up to (3) escalation levels per ATM
  - Notifications available via email
    - Email notifications are always 24 hours
    - Email can be sent in a text message format to mobile phones
    - Retries for email are only done if the emails are not handed off to the email server correctly
    - Email includes a notification when the incident closes in OpteView® ResolveSM

Remote Service Access
a. Diebold Nixdorf's OpteView® operations will receive OpteView® messages from a Diebold Nixdorf ATM covered by Diebold Nixdorf's Second Line Service via the OpteView® Agent and OpteView® ResolveSM Service.

b. Once a message is received, Diebold Nixdorf OpteView® Remote Support operations may perform the following tasks, depending on the nature of the received status data:

- Initiate a communication session with the ATM based on permissions set by the Client.
- Perform one or more diagnostic tests.
- Fix the machine remotely or recommend to a Diebold Nixdorf technician who will service the machine, recovery solutions and/or parts needed for the repair.

OpteView® ResolveSM System Architecture
a. OpteView® ResolveSM Software Agents must be installed on each ATM and the ATM must be configured to allow the Agent to provide a secure defined private connection to Diebold Nixdorf via SSL communications for remote access

- NOTE: Status delivery may not be SSL encrypted; alternative options may be utilized depending on terminal software levels:
  - Diebold Nixdorf Remote Notifier or Agilis Fault Alarm Notifier (FAN) outbound TCP/IP over private connection to Diebold Nixdorf
  - SNMP bi-directional UDP over private connection to Diebold Nixdorf

b. OpteView® ResolveSM Agents include an agent for remote service and agent(s) for status reporting. The ATM performs a DNS query to look up the TCP/IP address of the OpteView® Enterprise Server at Diebold Nixdorf. This query can be resolved by the Client's internal server, DNS servers, or by looking up an entry in the ATM's local host file.

c. The ATM initiates an outbound connection across the Client's network (via firewall, proxy servers or routers) to the OpteView® Enterprise Server within the Diebold Nixdorf System DMZ.

- A Firewall rule may need to be added to the Client Management server or locally at the ATM to allow the agent's ekernel.exe to access the OpteView® Enterprise Server outbound over TCP/IP

  - The above rule will also allow the OpteView® ResolveSM Agent's ekernel.exe to access the Policy Manager Application on the Client's network. However, if additional application security is required, two rules may be added: one for ekernel.exe outbound port 443 (Agent to OpteView® Enterprise Server) and one for ekernel.exe outbound port 1024 (Agent to Policy Manager Application) where 1024 is the port number specified during Policy Manager Installation.

- The OpteView® ResolveSM Agent will communicate with the Diebold Nixdorf OpteView® ResolveSM Enterprise Server by first passing through Client's TCP/IP network. Client will route all OpteView® ResolveSM Agent traffic via secure private connection to Diebold Nixdorf using DNS addresses opteview.Diebold Nixdorf.com, opteviewgas.Diebold Nixdorf.com, and opteviewgasi.Diebold Nixdorf.com.

d. The OpteView® ResolveSM Agent authenticates itself to the OpteView® ResolveSM Enterprise Server at Diebold Nixdorf via an independent third party digital certificate.

e. The ATM makes an outbound connection via SSL (port 443) to verify the authenticity of the digital certificate for Diebold Nixdorf's OpteView® Enterprise Server.

f. The ATM registers itself with Diebold Nixdorf's OpteView® Enterprise Server via a unique Diebold Nixdorf assigned serial number.

g. A periodic message is sent from the Policy Manager Application on the Client's network to the ATM to download any updates to the ATM's security policy. This policy is defined, maintained, and is the responsibility of the Client.

OpteView® ResolveSM Policy Manager Application

a. For the Client to have visibility and control over remote access, Diebold Nixdorf will provide for the duration of the OpteView® ResolveSM Service and while the Electronic Access Agreement for OpteView® Agents remains in effect a Policy Manager Application.

- For Client ATMs that communicate with their internal network, the Policy Manager Application is to be installed on a Client provided workstation or server inside the Client's network

- For Client ATMs that do not communicate with their internal network and are directly connected via a Diebold Nixdorf provided communication path, the Policy Manager Application is hosted in Diebold Nixdorf's Managed Services Data.

b. Each applicable ATM (OpteView® ResolveSM Agent) must be able to communicate with the Client's Policy Manager Application on the Client's internal TCP/IP network or must be directly connected to the Diebold Nixdorf-hosted Policy Manager via a Diebold Nixdorf provided communication path.

c. The ATM makes a connection to the Policy Manager Application using standard http on TCP/IP port 1024 (or an alternative port if needed).

d. The ATM keeps a current copy of its policy – as defined by the Client in the Policy Manager Application – on its hard drive. This policy is consulted before allowing any action to be taken between the OpteView® ResolveSM Agent on the ATM and the Diebold Nixdorf OpteView® ResolveSM Remote Support operations group. The local policy is verified each time the OpteView® ResolveSM Agent checks in with the Policy Manager and is updated only if the defined policy has changed.

e. The Client hosted Policy Manager Application notifications use a Client provided email address and exchange. For this reason, the Policy Manager work station or server must be able to access the Client email system.

PERFORMANCE REPORTING

Reporting is available to help the Client analyze performance, pinpoint problem areas and plan corrective action. Diebold Nixdorf OpteView® ResolveSM reports are provided via SERAS, the Services Electronic Reporting Access System, which is a secure web based reporting system. Reports are available in SERAS for 90 days. Reports include:

a. ATM availability reporting for one ATM or a group of ATMs
   - Lists the ATM ID, site name, total time for calculations
     - o down time related to communication faults and percentage
     - o down time related to hard faults and percentage
     - o down time related to supply faults and percentage
     - o degraded time and percentage
     - o down time and average availability

b. Most Frequent Faults for one ATM or a group of ATMs
   - Identifies the frequently reoccurring statuses that generated trouble tickets for the ATM network
   - Each status indicates the fault code, count, amount this fault contributed to the degraded time, and the amount this fault contributed to the down time for the requested period. ATM SkimmingAlert events, if applicable, will be included in this report.

c. ATM Status Messages
   - Provides ability to locate a specific ATM status message by date, ATM, site, fault code or device status

d. Trouble Ticket Overview
   - Ticket number
   - Open date (time the ticket was opened in the dispatching system)
   - Arrival date (time a technician arrived)
   - Completion date (time ticket was closed in the dispatching system)
   - Ticket status
   - Average arrival time and average completion

e. Trouble Tickets
   - Provides ability to locate a specific trouble ticket and its details

f. Downloads of Reports
   - SERAS storage availability allows Client to analyze and archive reports for a period of 90-days after reports are posted

IMPLEMENTATION PROJECT – DIEBOLD NIXDORF RESPONSIBILITIES

a. Configuring the Diebold Nixdorf OpteView® ResolveSM Systems for the OpteView® ResolveSM availability management Service

IMPLEMENTATION PROJECT – CLIENT RESPONSIBILITIES

a. The Client must provide the following information to the Diebold Nixdorf Project Manager:
   - Primary contact person (Client's Project Manager)
   - Two Client IT contact persons for connectivity scheduling and certification

b. OpteView® ResolveSM Access Specific:

   - Workstation or server for Policy Manager Application

- o Configuration Information
  - Operating System
  - Workstation or server IP address
  - DNS Primary and Secondary IP addresses (if available)
  - Email hostname and email address for Policy Manager notifications

- o Client Resource to install Policy Manager Application via Phone and WebEx Support with OpteView® ResolveSM Implementation Team.
  - Client Resource(s) to be present at Policy Manager Training. Training is remotely provided by the OpteView® ResolveSM Administrator.

c. Client is responsible for providing any proxy authentication information required to allow the individual ATMs to access the Client internal network. Separate proxy authentication information may be provided for the OpteView® ResolveSM Agent to OpteView® ResolveSM Enterprise Server connectivity and for the OpteView® ResolveSM Agent to Policy Manager Application connectivity.

d. Once the OpteView® ResolveSM Agents at the ATMs are connected to the Client internal network, Client will be responsible for routing the message traffic to the DNS name opteview.Diebold Nixdorf.com, opteviewgas.Diebold Nixdorf.com, and opteviewgasi.Diebold Nixdorf.com.

e. Client is responsible for updating the Symantec/Sygate software (firewall) rules at the ATM (with Diebold Nixdorf's assistance) as required for the OpteView® ResolveSM Agent to access the Policy Manager Application and the OpteView® ResolveSM Enterprise Server.

The Diebold Nixdorf Project Manager will work with the Client, Diebold Nixdorf resources and third-party resources (typically Telecomm and Host providers) as identified in the statement-of-work, to provide a mutually agreed upon project plan. Responsible representatives from the Client, Diebold Nixdorf and third- party resources will be required to participate in scheduled meetings and to respond to requests for information in a timely manner. The Client is responsible for ensuring that any required third-party that they have a contract with is participating as needed. Failure to provide information in a timely manner, as identified by the Diebold Nixdorf Project Manager, the project plan and project meetings may impact the timely implementation and provision of the Services. Diebold Nixdorf cannot guarantee that the Services will be available by a specified date, but will work with the Client and all required resources to jointly agree on a completion date.