TM/ART – A User Experience

TM-104
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Discussion Topics

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› Monitoring at Diebold
› TMART at Diebold
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  – Value in ART vs. PETE (Patrol End to End)
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  – ART KM
› Reporting the collected data from the synthetic transaction
Diebold Incorporated – www.diebold.com
- Headquarters located in North Canton, Ohio
- Representation in nearly 90 countries worldwide

Diebold develops, implements and services the world’s most advanced self-service and security delivery systems –
- ATMs
- Remote banking – drive-up, tellers, branches
- Physical security and security monitoring
- Voting terminals
- Transaction and event processing software

IT 20+ Years
Manage the “Enterprise Services” Team

- Monitoring and alerting
  - 24 ART robots globally running 15 recordings
  - 300 servers globally including 45 database instances
- Mainframe
  - 3 Lpars
  - 40 system software products
- Backup/Recovery including Disaster Recovery
  - 300 servers globally and 50 databases
  - On site and off site tape management
- Job scheduling
  - 300+ servers globally
  - All platforms – Mainframe, AIX, Windows, Unix, Linux
IT – Major Enterprise Systems

Mainframes
- CICS
- DB2
- MQSeries
- IMS
- WebSphere
- System Messages

AIX
- Click Schedule Application
- MQSeries
- CICS Transaction Gateway
- WebSphere

Windows
- Optio for Oracle Printing
- Performance Software
- Exchange
- Active Directory
- Click Schedule Application
- Khalix
- MQSeries
- Intranet/Internet

HP/UNIX
- Oracle E-Business – Oracle DB
- BAAN – Informix DB
- TSM – Tivoli Storage Manager
- Mercury ITG (Kintana)
- ControlIM - Job Scheduler
- MQSeries

Monitor 300 + Servers
- Unix – HP..AIX..LINUX
- MVS - 3 Lpars
- LINUX
- Windows

LINUX
- Oracle E-Business – Oracle DB
- WebMethods
- WebSphere
- MQSeries
Monitoring at Diebold

- BMC Patrol Agent: HP_UX, Linux, AIX
  - Operating System
  - Informix Database
  - Oracle Database
  - Oracle eBiz
  - BaaN
  - TSM
  - Control-M
  - DBXRAY Oracle
  - MQ Series
- BMC Patrol Agent: Windows
  - Operating System
  - Exchange
  - SQL Database
  - Cluster Manager
  - ISM
  - DNS
  - Web Pages
  - Agent Ping
  - Host Ping

- Event
- Notification Servers
- Patrol Enterprise Manager (PEM)
- Web Consoles Operations Console Desktop Clients
  - AlarmPoint
    - Emails
    - Phones
    - Pages
- Notification Servers

- Application Response Timer (ART) - simulates PC user client and web browser transactions
- BMC AutoOperator On MVS
TMART – Global Execution Servers

North Canton, Ohio (4)
Green, Ohio (1)

Zellik, Belgium
ErpeMere, Belgium
Leeds, England
Windsor, England
Guyancourt, France
Cassis, France
AIX en Provence, France
Mahlow, Germany
Milan, Italy
Ultrecht, Netherlands
Lisbon, Portugal

PuDong, China

Mexico City, Mexico
Bogota, Columbia
Johannesburg, South Africa
Sydney, Australia
Melbourne, Australia
TMART – Customer uses

› Need for end user simulation around the world.

› Response time
  – Threshold settings
  – Alerting

› Availability
  – Up or Down
  – Valid content

› Performance -
  – Domestic vs non-domestic
  – Timings .. Accuracy.. Saved 14 man hours by automating

› Trend Analysis – impact of growth
**TMART - Components**

**Execution Servers**
- Executes the synthetic transaction
- Can be located anywhere

**ART Central**
- Stores scripts
- Create monitors (schedules)
- Define locations (execution servers)
- View reports

**Monitor Workbench**
- Create scripts (recordings of client transactions)
- Created on a protocol level

**ART KM (Patrol)**
- Pulls data from ART Central
- Allows for threshold settings
- Fits into BMC’s Performance Manager Infrastructure

**SilkTest**
- Used to create record transactions of Windows software that does have a supported protocol
TMART - Added value in ART vs PETE

› Support for more enterprise applications. ie Oracle Forms

› Recordings
  – Execute at the protocol. More apples to apples. Eliminates the desktop.
  – Does not require dedicated machines. Runs in background

› Script Creation
  – PETE did not have a scripting language
  – Much easier and more flexibility
  – Attribute
  – Help information
  – Can now modify internet recordings
  – Stored centrally in ART Central and can be downloaded to Workbench
  – Not always necessary to re-record
TMART - Added value in ART vs PETE - cont

› Playback enhancements
  – TrueLog – capability to see what was entered
  – Capability to customize on TrueLog Explorer

› Scheduling enhanced to permit exclusions

› Error diagnosing centralized in ART Central

› Error more informational

› The ART KM has improved threshold and alarm settings
Pre-Recording details

- Work with the business units.
- Define when to do a timer
- Do we need content checking
- How will the threshold be set? Who will get notified?
- Define the schedule
User experience with TMART

- The following slides will be done via a live demo. Tips and techniques from experience will be shared as well as comparisons to PETE (Patrol End to End).

- WorkBench

- ART Central

- ART KM
This first script will be very simple. It is a web transaction that will have no steps, attributes, or content verification.
Welcome to the world of color with ART!

This is the actual recorder. It began from selecting the “Model Script” from the prior screen. You can create custom timers (steps) while recording.

Timer buttons
• Define
• Start
• Stop
Workbench – Simple Script cont…..

TrueLog – See what the users see by seeing the breakdown of the script as it runs. You can add custom timers and content verification here.
Upload the script to ART Central. This script is stored in a sql database on ART Central. Tip – make the name meaningful. It will help especially if you need to backout.
Add new Project – It is not always necessary to define a project. Projects can be one monitor or multiple monitors. A monitor is comprised of an uploaded script and a schedule.
Add a monitor to the Project – Select Central ➔ Configuration ➔ and project BMC_UserWorld. As you can see, there are no monitors defined. Later, in the demo you will see more under this project.
The uploaded script is stored under Custom Monitors. You can see why the naming of the script may be beneficial.
Define the schedule as well as the location (execution server) for the monitor to run. As you can see, the capability to utilize exclusions on the schedule is an enhancement to the scheduling. This gave us the capability to not run certain monitors on Saturday evenings during down time.

Tip – Load balance the interval when running many monitors on an execution server.

You can specify the minute to start. For example, we have multiple monitors so we may have defined one to start on the 12 minute and one to start on the 20 minute.

Exclusion to the schedule
The administration as to the health of the project, monitor and the execution server are centralized within ART Central. The monitor errors are posted here as well as being able to access the truelog upon error. Use the Reports tab under Central.
This is an example from a monitor that was failing. By selecting the Execution Log tab, we see that there is a file associated with the errored log. We click on the attached file which will then take us to the TrueLog. We have found this a tremendous time saver for trouble shooting.
Clicking on the download will open up the TrueLog. The next screen will display the error at the time of the recording.
True Log – The above displays the truelog for the monitor that errored. Prior to ART, this information was not available.
Since we use BMC Patrol, we use the ART KM. This allows us to set thresholds based upon availability and response time. In addition to the event monitoring, we pull the response times from the ART KM each month to be included in the operational metrics.
It is so easy to enhance the scripts. The storing of the scripts on the SQL database in Art Central is beneficial in that anyone who has the workbench can download the script. Select the download button within the Configuration display.
Enhance the Simple script – Add timers

The downloaded script from Art Central opens up the Workbench. To add custom timers (steps), it is easy to do using the TrueLog explorer. Run the TryScript and expand the tree on the left. Right click on the points in the tree and select “start timer” or “stop timer” depending where you are in the process.
Enhance the Simple script – Add content check

Using the TrueLog Explorer, it is also easy to add content check. Highlight the text and right click.
Enhance the Simple script – the modified version

As you can see, just by using the TrueLog Explorer, we have added timers and content check.

Welcome to the world of color with ART!

As you can see, just by using the TrueLog Explorer, we have added timers and content check.
Enhance the Simple script – the modified version

The modified script was uploaded to ART Central and defined as another monitor in the project BMC_UserWorld. The modified script now has the timers showing in the ART KM.
Use of Project Attributes - Workbench

Project attributes allow for flexibility in sharing of the scripts. This attribute will be uploaded to ART Central. Using the attribute in the monitors allow for the recordings to be shared for other monitors. For example, we were able to use the same script for different Oracle instances just by defining an attribute for the url.
In Art Central, the attributes are automatically associated with the monitor. It is so easy to change the attribute in TMART. It used to take us hours to recreate recordings just to change the url for internet recordings. We can now do it in quickly just by adding a new monitor and change the attribute. The recordings are now apples to apples.
Use of Project Attributes – ART KM
Reporting

› BMC Patrol Performance Reporting (Base Reporting)

› PAMO – Patrol Adapter for Microsoft Office

› Dump_Hist
  – BMC Patrol utility
  – Runs a scheduled job via BMC’s ControlM on the server where the ART KM is installed
  – Job follows dump_hist to ftp the file to a Windows server
  – The data collected is stored in a SQL database
  – Using SQL Reporting the information is reported and viewable via the web
  – Using SQL Reporting, the reports are emailed daily to business units
Reporting – cont....
Reporting – cont.... SQL Reporting
Questions ?