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The EQ Times

Special Interest Articles:

Individual Highlights:

Will the 2005 energy act cause a Y2K?

Tivoli, Webshere, and Rational applications might not be able to tolerate the possible downtime or data inconsistencies caused by the new Energy Policy Act of 2005.

Some applications will run one hour behind other applications and services for one month in March and again in October due to the new changes in U.S. DST rules. You might have to update some of your JRE's. Older JRE's will have outdated code that will be superseded by the Energy Policy Act of 2005. As a result, applications running on an older JRE may report incorrect time from March 11, 2007 through April 2, 2007 and from October 29, 2007 through November 4, 2007. APARs, maintenance, or actions will be required for the Tivoli, WebSphere Application Server and operating systems. We have talked to a few companies that are in panic mode and we see everyone re-inventing the wheel again. We have a large customer who is using EQ to solve this problem. We can consolidate this process and EQ can help make this situation as painless as possible. If you have Endpoints we can help you solve this problem. For more info please contact: **John Willis at 919 244-9680 Also see …**

http://www.capitalsoftware.com/images/rd/eqdst.pdf

EQ ITM 6 Rapid Deployment (EQ-RD)

enterprise-Q v1.8 will include complete automation for ITM 6.1 agent deployment and operations. New features will include agent deployment, migration, upgrades, remote management, automated MSL assignments and more, such as depot management and agent policy methods along the lines of Allow Install, After Install, and Select Gateway.

ITM 6.1 Rapid Deployment is built on top of the enterprise-Q automated queuing mechanisms for completely controlling, reporting, and retrying these activities. Furthermore, these new features will utilize enterprise-Q rules for automating the entire process, keeping your ITM 6.1 operations SOX-compliant. For more info please contact:

John Willis

919 244-9680

Also see …

http://www.capitalsoftware.com/images/rd/eq.pdf

EQ Starts down the Open Source Path

"Capital Software now does ITM 6.1 Training.

If you haven't been to the EQ Forums on our website in a while you are missing some of our new Open Source code. During the development of the EQ-RD product we have created a lot of tools that we have released under the GNU 2.0 license. Currently we are only making some of the EQ-RD tools available. Here are some of the new scripts.

OSAgentConfig.pl

This script can be used as a post installation configuration script if you use the EQCreateAgentTar.pl this script can use an args.dat file or be passed parms to set configurations of agent. I use this command to migrate agent between TEMS.

http://www.capitalsoftware.com/downloads/scripts/OSAgentConfig.zip

EQITMCmd.pl

This script is an all purpose tacmd/soap command. My favorites are pingtems and getrtems.

http://www.capitalsoftware.com/downloads/scripts/EQITMCmd.zip

ITM 6.1 Tutorial (Part 1) Physical Infrastructure

This is a multi part article that will provide a tutorial on ITM 6.1. The first part will concentrate on the Physical Infrastructure.

There are five preimary infrastructure servers in an ITM 6.1 architecture.

- TEMS
- TEPS
- WPA
- SPA
- RDBMS

The Tivoli Enterprise Server (TEMS) is used as both a HUB server and REMOTE server. Normally an ITM 6.1 physical deployment will include one primary HUB_TEMS and up to about 15 RTEMS that connect to the HUB. Currently IBM states that you should not exceed 10k agents in one HUB and not to exceed 1.5k agents in a single RTEMS. A TEMS can be AIX, Solaris, Linux, and Windows. Each TEMS has a proprietary database. This database contains situations, policies, events, and managed system status (i.e., Heartbeat). The HUB TEMS is similar to a TMR Server and is the first server installed. A RTEMS is similar to a ManagedNode/GWY. Typically you only install your agents into a RTEMS. This way all of your RTEMS will manage the agents and their heart beating. The RTEMS will propagate event and heartbeat status to the HUB.

Hub TEMS

- Provides User authentication
- Stores Situations and Policies
- Handles all upstream RTEMS Heartbeat status updates
- Handles TEPS Heartbeat
- Handles requests from the TEP
- Handles requests from all SOAP requests
- Can be configured as a HUB Depot for remote deployment
- Primary TEC interface

Remote TEMS

- By convention handles all TEMA communication
- Handles all TEMA heartbeats
- Runs TEMA "Run Actions" that are defined to run on a TEMS
- Provides (optional) TDW collection
- Depot management and remote deployment for NON-OS

The next part 2 article will discuss the rest of the physical architecture and follow-on parts will also discuss the logical infrastructure.

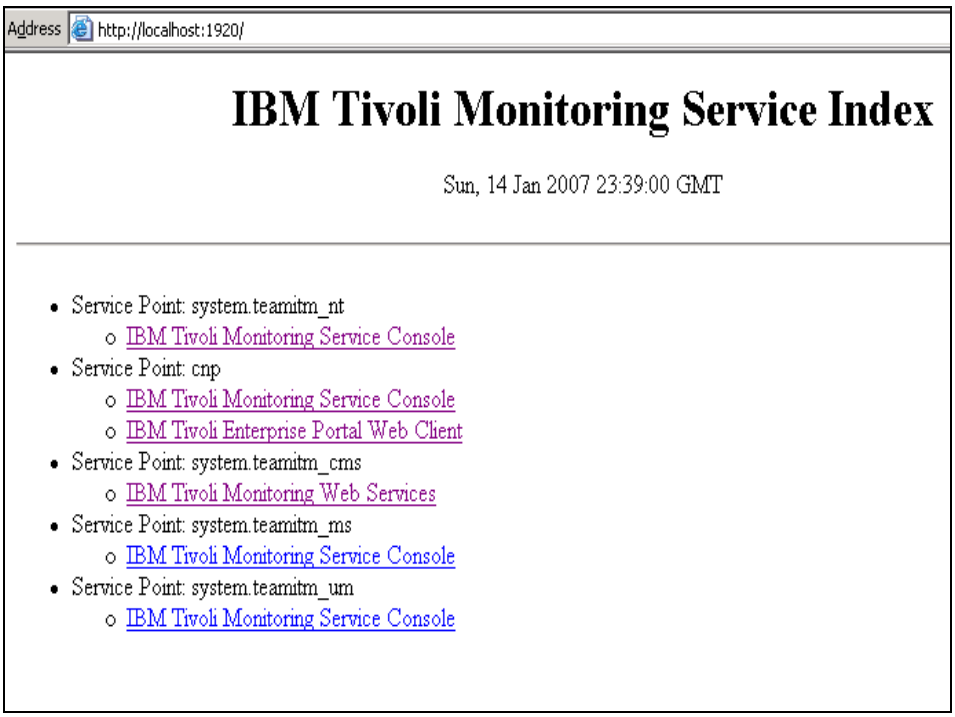
Using an OS Agents WEB Server

Some useful things you can do on your Agent's WEB Server

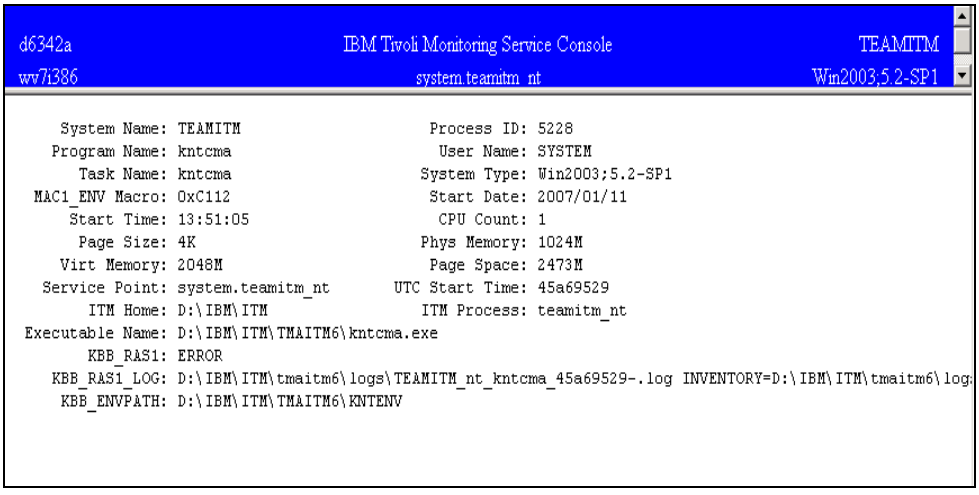
You can poke into any agent on port 1920 and do some interesting stuff. I have a Windows OS agent in my test lab called caps001. For example,

http://localhost:1920

You will get a console that looks like this:



In this example I select the Windows OS agent and then it will prompt me to authenticate on that system. I have found that any userid that exists on that system will do as long as you know the password. The initial command prompt for an OS agent will look as follows:



On the command prompt you can get by entering the "?" command as follows.,.

```
    res1: Display status of RES1 logical resource manager
    ras1: Manage RAS1 (Reliability, Availablity, Servicability)
    bss1: Manage BSS1 (Basic System Services)
     kra: Manage KRA (Remote Agent Framework)
    kde1: Manage KDE1 (Transport Services) component
 kdcstat: Display status of KDC (RPC Services) component
    http: HTTP Server Management
 gateway: Manage Firewall Gateway
    csv1: Manage CSV1 (Contents Supervision)
```

The only three commands that I found to be useful are the **ras1, bss1,** and **kra**.

The RAS1 command can be used to set, or list ras1 trace setting. It also can be used to dump a log segment.

RAS1 Command

```
Positional argument required

usage: ras1 <subcommand> ...
   or: ras1 (<subcommand> ...) (<subcommand> ...) ...

subcommand list:

               units: List registered compilation units
               ctbld: Show link unit build information
                 set: Control traces and filters
                list: List active filters
                 log: Display log capture buffer
```

BSS1 Command

The bss1 is the most useful of the three commands. Here is a list of the bss1 help:

```
Positional argument required

usage: bss1 <subcommand> ...
   or: bss1 (<subcommand> ...) (<subcommand> ...) ...

subcommand list:

                dir: List Files
           evaluate: Evaluate string expression
             config: Manage configuration variables
               info: Display BSS1_Info data
             setenv: Assign environment variable
             getenv: Display environment variable
            listenv: Display resident CT variables
```

I use the “bss1 listenv a lot to make sure config parameters that I set in the env and ini file are realy getting set. For example if I set CTIRA_HEARTBEAT to a smaller number the only way I can validate if it was changed is by using the bss1 listenv or bss1 gentenv.

For example I could use the the following command to see if the parm is set:

bss1 getenv CTIRA_HEARTBEAT

I could also use the bss1 setenv to change the parm, however, it is a temporary change if you do not change it the env or ini files. You can also use the bss1 listenv to see all of the environment variables. When I get a chance I am going to add this as a transaction in EQ. The bss1 command can also be useful in setting the **KDC_DEBUG** variable dynamically without having to recycle the agent or server.

The last parm that I have found to be useful is the kra command. Actually it really isn’t that useful but it is really cool for people who like to play with things like this after their kids go to bed. The kra command can be used to list the history tables on the agent.

You can use the kra list command to get a list of the local history table names. For example,

kra list

```
Registered Table List

          Name:  KNT.NTPAGEFILE                  Requests:  Yes    Columns:  8
          Name:  KNT.NTPROCSSR                   Requests:  No     Columns:  15
          Name:  KNT.WTLOGCLDSK                  Requests:  No     Columns:  22
          Name:  KNT.WTMEMORY                    Requests:  No     Columns:  38
          Name:  KNT.WTOBJECTS                   Requests:  No     Columns:  12
          Name:  KNT.WTPHYSDSK                   Requests:  Yes    Columns:  17
          Name:  KNT.WTPROCESS                   Requests:  Yes    Columns:  31
          Name:  KNT.PROCESSIO                   Requests:  No     Columns:  17
          Name:  KNT.WTTHREAD                    Requests:  No     Columns:  19
          Name:  KNT.WTSYSTEM                    Requests:  Yes    Columns:  32
          Name:  KNT.NETWRKIN                    Requests:  No     Columns:  23
          Name:  KNT.NETSEGMT                    Requests:  No     Columns:  12
          Name:  KNT.UDPSTATS                    Requests:  No     Columns:  11
          Name:  KNT.TCPSTATS                    Requests:  No     Columns:  15
          Name:  KNT.IPSTATS                     Requests:  No     Columns:  23
          Name:  KNT.ICMPSTAT                    Requests:  No     Columns:  33
          Name:  KNT.INDEXSVC                    Requests:  No     Columns:  17
          Name:  KNT.INDEXSVCF                   Requests:  No     Columns:  9
          Name:  KNT.MSMQIS                      Requests:  No     Columns:  13
          Name:  KNT.MSMQQUE                     Requests:  No     Columns:  9
          Name:  KNT.MSMQSVC                     Requests:  No     Columns:  15
          Name:  KNT.MSMQSESS                    Requests:  No     Columns:  15
          Name:  KNT.JOBOBJ                      Requests:  No     Columns:  19
          Name:  KNT.JOBOBJD                     Requests:  No     Columns:  38
          Name:  KNT.DHCPSRV                     Requests:  No     Columns:  20
          Name:  KNT.DNSMEMORY                   Requests:  No     Columns:  12
          Name:  KNT.DNSZONET                    Requests:  No     Columns:  24
```

Submit Reset kra list

Then you can waste your time even further by listing all the columns of a table as follows:

kra table WTMEMORY:

```
Table Display:  KNT.WTMEMORY

        Column:  originnode
        Column:  sampleno
        Column:  rowno
        Column:  timestamp
        Column:  zattrib
        Column:  zvalue
        Column:  availbtmem
        Column:  cachebts
        Column:  cachebtspk
        Column:  cachefltsc
        Column:  commlimit
        Column:  commbyte
        Column:  demzeroflt
        Column:  frsystblen
        Column:  pgfaultsec
        Column:  pgreadsec
        Column:  pgwrtsec
        Column:  pginputsec
        Column:  pgoutptsec
        Column:  pagessec
        Column:  plpgalloc
        Column:  plpgbyts
        Column:  plnpalloc
        Column:  plnpgbyts
        Column:  trnfltsec
        Column:  wrtcpysec
        Column:  availkb
```

Submit Reset kra table WTMEMORY

John Willis accepts position as CTO at Capital

Press Release

Chantilly, Va., November 30, 2006—

Capital Software, Inc., the software provider of enterprise-Q a web-based solution to Tivoli enterprise management, today named John Willis as the company's new Chief Architect and Chief Technology Officer. John - a software industry veteran with more than 25 years of experience - will drive the evolution of enterprise-Q's operations and management platform. "John is another great addition to Capital's engineering team who adhere to one, simple philosophy: provide quality product." said Dean Leonard, CEO of Capital Software. "Willis' proven vision in architecture design and technical leadership, along with his experience working with mission-critical applications, will continue to keep Capital's product at the forefront of innovation.". Previously, John was the founder of Gulf Breeze Software, an IBM Tivoli consulting company. John is a leading Tivoli architect and trainer in the IBM/ESM space. He has delivered over 10,000 hours of training Tivoli products around the world and is considered an expert in ESM event management and monitoring. John has authored over 6 IBM Redbooks. John was also the founder and chief architect at Chain Bridge Systems, a lead software developer of TMON-MVS by Landmark Systems, and a developer MICS by Morino Associates. He also developed SystemsView software products for Candle Corporation and Infrawise Inc in the 1980's. He has also served as an automation manager at GE Capital, and Exxon. "I believe that IBM has provided enterprise-Q a new life by de-emphasizing the role of the "Framework" in ESM. We are already delivering rapid ITM 6.1 management solutions based on enterprise-Q's flexibility, so it's exciting to join the company that's leading the charge", said John

Check out the new ITM 6.1 Forum Topics

Topics	Replies	Author	Views	Last Post
Did you know that there is a WEB Server on your Agent?	0	john_willis@capitalsoftwa	14	14 Jan 2007 02:35 john_willis@capitalsoftwa
Another day in the life of an ITM 6.1 implementation	8	john_willis@capitalsoftwa	168	12 Jan 2007 18:02 john_willis@capitalsoftwa
ITM 6.1 Best Practices for Implmenetation - TUG Schedule	4	john_willis@capitalsoftwa	41	12 Jan 2007 15:22 john_willis@capitalsoftwa
Are you ready for the mini-Y2K (i.e., the JRE DST problem)?	0	john_willis@capitalsoftwa	15	12 Jan 2007 03:30 john_willis@capitalsoftwa
Check out EQ ITM 6.1 Rapid Deployment	0	john_willis@capitalsoftwa	11	11 Jan 2007 15:26 john_willis@capitalsoftwa
More EQRD Scripts Available	1	john_willis@capitalsoftwa	51	09 Jan 2007 15:32 dean@capitalsoftware.com
Remote UA Update/Deploy	5	troncek@gmail.com	60	09 Jan 2007 12:03 troncek@gmail.com
Demystifying ITM 6.1 Agent Configuration Files on Windows	0	john_willis@capitalsoftwa	22	09 Jan 2007 06:32 john_willis@capitalsoftwa
TEMS Ping	0	john_willis@capitalsoftwa	33	08 Jan 2007 00:40 john_willis@capitalsoftwa
Demystifying ITM 6.1 Agent Configuration Files on Unix	0	john_willis@capitalsoftwa	28	07 Jan 2007 23:04 john_willis@capitalsoftwa
ITM 6 Operating System to Interp Type Cross Reference	0	john_willis@capitalsoftwa	28	07 Jan 2007 13:02 john_willis@capitalsoftwa
FYI.. The TEP Help is actually helpful	0	john_willis@capitalsoftwa	14	07 Jan 2007 12:18 john_willis@capitalsoftwa
Check out the two new EQRD scripts...	1	john_willis@capitalsoftwa	64	22 Dec 2006 20:42 dean@capitalsoftware.com

EQ Ready for IBM Tivoli Software

Since the last release, enterprise-Q has achieved Ready for IBM Tivoli software certification through IBM's Orchestration and Provisioning Automation Library (OPAL) initiative to help organizations automate their Tivoli environments. As such, the 'Ready for IBM Tivoli Software' icon has been added to the bottom of each web page

More Resource for the 2005 Energy Act

Information about the Energy Policy Act can be found on the following links …

US Department of Energy Web site. (link:
http://www.eere.energy.gov/buildings/appliance_standards/news_detail.html/news_id=9273)
Daylight Saving Time (DST) information for IBM Tivoli Monitoring
http://www-1.ibm.com/support/docview.wss?rs=650&context=SSTFXA&dc=D600&uid=swg21248322&loc=en_US&cs=UTF-8&lang=en&rss=ct650tivoli
Daylight Saving Time alert
http://www.ibm.com/support/alerts/daylightsavingstimealert.html?
U.S. Daylight Saving Time Changes in 2007
http://java.sun.com/developer/technicalArticles/Intl/USDST/
U.S. Daylight Saving Time (DST) default date changes
http://www.hp.com/products1/unix/java/DST-US.html
Set your Java clocks for the new DST
http://www.javaworld.com/javaworld/jw-12-2006/jw-1201-dst.html

Capital Software and Tivoli User Group's (TUGS) Update

I spoke at the Atlanta TUG last Thursday. It was an interesting meeting. Most of the users in the audience were Netcool users and they had an interesting perspective on the upcoming product transitions. My take away from this TUG is that ITM 6.1 is not going anywhere and its here to stay but it's probably about time put those prolog books in the yard sale .50 cents per book box. They also referred to what they are calling TEP Next. One of the Netcool guys told me that IBM is letting the Netcool developers do the "TEP Next" development. Hopefully this means things like AJAX, WEB 2.0 and maybe a little less JAVA. HOORAY!!!!!l

Here is our upcoming schedule…

Tivoli North Central User Group
Date: Feb 19th, 2007

Upstate New York Tivoli User Group (UNYTUG)
Late February.

Check our Forum for updates..

www.capitalsoftware.com/Forums

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We're on the Web!
See us at:
Capitalsoftware.com

ITM 6.1 Workshop

This is an intense one-week workshop covering all of the features of ITM 6.1. The workshop includes:

- Overview and Architecture of the ITM physical and logical infrastructure
- Planning and implementation of the ITM 6.1 infrastructure including best practice and real world case studies
- Security and firewall support
- Maintenance and Troubleshooting
- Advanced customization including Port customization, Universal Agent, and the SOAP API interface

Case study based training

We will cover the following topics:

- EIB Architecture
- Remote deployment of agents
- Heartbeat agent maintenance
- Data Warehouse and reporting
- TEC Interface
- Situation customization and best practice
- CLI's (tacmd and itmcmd)
- Create Script. ODBC, File, and SNMP based UA's
- Invoking SOAP calls from