INFORMATION SHEET ON I.T. PROJECTS
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PROJECT
TAXUDMON (TAXUD Monitoring of BEA WebLogic servers)
SUMMARY
The TAXUDMON system enhances the embedded management and monitoring capabilities (Mbeans) of WebLogic servers by storing in a database the retrieved values of monitored objects. The system allows multi-user access and provides a GUI with colour-coded alarming on interactive monitoring.

LEGAL BASIS

General	none
Mandatory use of I.T.	none

DESCRIPTION

Contents:

For centrally developed applications, the strategy of DG TAXUD is to host the information systems at DIGIT/DC and to make use of the WebLogic application servers as supporting infrastructure. The TAXUDMON application, which itself is an application served by a dedicated WebLogic server, exploits the available management beans of predefined WebLogic servers to remotely request the value of indicators (attributes of management objects). Retrieved values are used for near-line display and stored to an Oracle database for post-processing and historical analysis. The frequency and set of indicators to retrieve are configurable.

Process:
- Every 5 minutes (configurable), the TAXUDMON server requests the set of predefined (configurable) indicators via standard Java JMX.
- Retrieved values are stored in an Oracle database
- The TAXUDMON server hosts a web server (http daemon) and displays a graphical representation of the WebLogic servers (WLS) monitored this way. There is one "LED-object" displayed per server. An alert colour-code is used to reflect the current status of the WLS, compared to previous data:
  green : no alarm
  orange : one alarm (first occurrence of an alarm)
  red : at least two consecutive alarms (two or more consecutive occurrences of the same alarm)
  An alarm for a monitored object's attribute is defined by specifying thresholds for the acceptable range of the value retrieved when requesting this indicator.
- The LED-object displayed is the top-level object of all Mbeans related to one WLS. This object can be further expanded to retrieve the object(s) causing the alarm(s)

STATUS

- In production since 07/2006.

PLANNED ACTIVITIES

- 2007: enhancement of the post-processing capabilities by allowing historical and statistical reporting

TECHNICAL INFORMATION

Technical infrastructure:
- TAXUDMON on dedicated WebLogic 8.1 server, running on Sun Solaris OS 5.9
- Oracle 9.1 database system,
- PC clients use their Internet browser to connect to the TAXUDMON server

Comments:
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