

## World's First Manufacturing Execution System Based on the Java EE 5 Platform

**iTAC Software AG chooses the newest Java platform: Enterprise Edition, v5**

*Dernbach, 22 October 2008 – With the iTAC.MES.Suite release 7.0, iTAC Software AG is the first MES provider to use the Java enterprise platform Java EE 5. With this innovative step, the company promises its customers the ability to avail themselves of numerous advantages.*

"The iTAC.MES.Suite has long been based on the Java programming language, which is securely established in the software development industry. With the decision to use Java EE 5<sup>1</sup>, we are now setting new standards in the MES world close to the shop floor", explains Dieter Meuser, founder and CTO of iTAC Software AG.

1. **Long-term investment security** through the use of the globally established, manufacturer-independent Java EE industry standard
2. **Executable on all strategic** Java application server platforms, the heart of professional business applications
3. **High-performance integration of heterogeneous IT infrastructures near the shop floor** through the new platform-independent, scalable and high-availability iTAC technology platform **ARTES**<sup>2</sup>

"These are just three of the most important advantages that we were able to achieve through the fundamental change in the architecture of our MES solution", promises Meuser. "At the same time, all proven functionality of the iTAC.MES.Suite is still available".

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<sup>1</sup> Java EE 5 is the specification of software architecture for applications developed in Java. It is used to provide a generally accepted framework on whose basis distributed multilevel applications can be developed from modular components.

<sup>2</sup> ARTES consists of three components: iTAC High Availability Service (**iHAS**), iTAC Monitoring **IMON** and **IHAP** (iTAC High Availability Protocol). See graph.

(Abbreviated version)

On point 1) With the **Java EE 5 industry standard**, the iTAC.MES.Suite offers a secure, efficient and individually scalable platform for relevant company processes close to the shop floor. Java EE 5 enables the iTAC.MES.Suite to use standardized enterprise services, such as information services, transaction handling, resource administration, database abstraction, etc. The availability and the fast, uncomplicated access to all data ensure decisive competitive advantages. "We can reduce development efforts for redundant functions and interfaces and dedicate more time to the development of functional extensions", explains Christine Lahnstein, Vice President of Software Development.

On point 2) The installation and operation of the MES software will be possible on the leading Java application server platforms such as BEA WebLogic, IBM WebSphere, SAP NetWeaver, Oracle Application Server, Red Hat JBoss and Sun Java System Application Server. Through the **platform independence**, there is a high level of flexibility on the customer side, especially as each customer can decide which cross-application Java application server platform to use, independent of the iTAC.MES.Suite.

The reference implementation of the iTAC.MES.Suite 7.0 is delivered on the open source product **GlassFish V2**.

On point 3) For **machine integration**, iTAC is relying on its proprietary ARTES<sup>3</sup> technology platform and the unicode-capable API service adapter of the iTAC.MES.Suite — here, the company sees a clear development advantage compared to standard Java EE implementations, particularly as the communication protocol is not standardized in JEE 5.

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<sup>3</sup> The ARTES technology consists of three components: iTAC High Availability Service (**iHAS**) as a cluster layer, iTAC Monitoring **IMON** (Monitoring Sub-System) and **IHAP** (iTAC High Availability Protocol) as a fast, binary, HTTP protocol that is available in various operating systems.

With the aid of the ARTES technology, the iTAC.MES.Suite can:

- monitor the machine interfaces and client components via the application server-side management consoles
- integrate heterogeneous machine assets with high performance

In addition, it can communicate with production plants regardless of manufacturer and age. At the same time, it is:

- scalable
- highly available
- and downward compatible (protection of investment)

The ARTES technology platform replaces the previous iTAC middleware.

**Other advantages of using Java EE 5 include**

- integration of the the iTAC.MES.Suite into ERP, PLM, and legacy systems via standardized Enterprise connectors
- simpler maintenance and administration of the MES application as a result of less configuration effort
- real-time process monitoring via a multi-channel architecture
- minimization of the investment costs and running costs (TCO: total cost of ownership)

Furthermore, iTAC also guarantees that the proven functionality is fully retained: Traceability (TR Service), Quality Management (QM Service), Production Management (PM Service) and Material & Logistics (ML Service).

"The multitude of systems and applications that have developed over time still present big challenges for enterprises. Increasingly, these are met by introducing forward-looking Service Oriented Architectures (SOA) that focus on the business processes" says Meuser.

iTAC takes this development into account with the iTAC.MES.Suite that will in future be completely built in Java EE 5. As the first MES

manufacturer worldwide delivering its system on Java EE 5, "we are already ideally equipped for current and future customer requirements and thus clearly stand out from our competitors" summarizes Dieter Meuser, CTO and founder of iTAC Software AG.

(Long version)

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**iTAC Software AG**

iTAC Software AG is a leading provider of manufacturing execution systems (MES). As a system and solution provider, iTAC develops, integrates and maintains its platform-independent iTAC.MES.Suite for productive enterprises around the world.

Thanks to its outstanding technological foundation and high standardization level, iTAC.MES.Suite can be used in many industries. From a functional standpoint, the MES solution enables a considerable improvement in the quality of processes and products, up to zero-fault production. With an extensive functional portfolio and the product philosophy "**more than just traceability**", iTAC.MES.Suite convinces not only through traceability (TR Service), but also through the Production Management (PM Service), Quality Management (QM Service), and Material Logistics (ML Service) services.

iTAC Software AG is headquartered in Germany, and branch offices are located in France, the U.S.A. and China. [www.itacsoftware.de](http://www.itacsoftware.de)