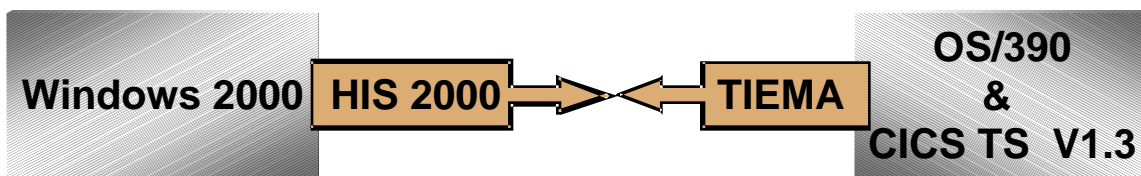


TIEMA - Integrating Windows 2000 and the Mainframe

TIEMA provides integration between Microsoft® Windows® 2000 and Windows NT® operating system-based applications and IBM OS/390 Customer Information Control System (CICS) transactions that perform direct 3270 terminal input/output (I/O). TIEMA is specifically built to work with Microsoft's COM Transaction Integrator (COMTI). COMTI is a component of Microsoft's new Host Integration Server 2000. TIEMA extends the type of host application accessible from Windows with no need to modify those applications. Users can migrate at their own pace to new front ends because the applications can still be accessed directly from 3270 terminals. New, Windows based technologies can be deployed at low risk onto existing, stable, mainframe business processes thus extending the life of those processes and protecting the large investments made over many years.



3270-Based CICS Applications

While COMTI can integrate with most modern CICS applications in which business and presentation logic are separated from one another using the CICS COMM AREA structure, a problem that has dogged older CICS applications is the inseparability of business logic and presentation logic. For many systems, this has been a stumbling block for integration with new development and Web technologies.

Previously, apart from PC-based screen scraping, there have been few robust, high-performance methods of integrating PC applications with these terminal-oriented CICS applications, which unfortunately still make up the majority of existing CICS transactions.

Now TIEMA enables seamless access to 3270-based CICS transactions from Windows 2000- and

Windows NT-based systems.

The applications can still be accessed from 3270 terminals or workstations running 3270 emulation, to allow for coexistence and a phased migration from 3270 screen access to Web-enabled applications.

TIEMA facilitates the integration of new technologies with the many CICS transactions that are 3270-based. The reach, lifetime and large investment in existing 3270-based applications can now be extended. Best of all, an existing 3270 application does not have to be altered or recompiled. The programmer does not need to know anything about 3270 data streams.

Applications running on Windows 2000 and Windows NT will now be able to use COMTI to integrate nearly all-existing CICS applications with the latest Windows-based applications and technologies, with the least

possible change to existing business processes.

As scalable as CICS itself

TIEMA runs on the mainframe. COMTI communicates with TIEMA via the supported COMM AREA model. TIEMA, however, adapts this model, leveraging facilities available within CICS, for 3270 stream based applications. The solution is as scalable as CICS itself. Additionally, TIEMA includes a mechanism to communicate between different CICS regions, with all the correct security settings.

TIEMA has the advantage that it can remain active longer than the execution of the target CICS transaction and is able to retain context across a sequence of several screens. Programmers who are developing for Windows can thus work at a higher level of abstraction than with the original screen-oriented CICS application, greatly simplifying client application



development. Even so, TIEMA allows for full control of the 3270 application, including cursor positioning and program function keys.

Support for COMTI Component Builder

TIEMA also generates COBOL descriptions of CICS map definitions that can be used by COMTI's Component Builder to build COM Wrapper objects. This allows the PC programmer to remain unconcerned about 3270 screen layout or parameter representation, isolating the PC program from changes to 3270 screen layouts. Each 3270 screen is represented as a separate COM method call by the VB or VC++ application, with relevant input and output parameters as well as the screen-to-screen navigation controls exposed as parameters on the method.

Customer Benefits

These two powerful technologies — Microsoft COMTI and Software AG's TIEMA — give users a flexible way to integrate existing CICS applications with Windows 2000- and Windows NT-based applications.

This is far superior to existing screen-scraping technologies. User applications work at a higher level of abstraction and the application logic

More Information

TIEMA incorporates Software AG's proven EntireX middleware technology. EntireX has a global customer base of large enterprises that recognize its high performance, scalability and robustness. EntireX handles hundreds of thousands of concurrent communications and smoothly copes with unexpected peaks in workload. More information can be found on the Web at <http://www.softwareag.com> .

Microsoft Host Integration Server 2000 is built on the proven Microsoft SNA Server technology, the leading gateway for accessing mainframe and AS/400 applications and data. More information on these Microsoft technologies can be found at <http://www.microsoft.com/sna> .

does not need to be tightly linked to the communications environment. There are none of the complexities of handling "unsolicited" messages.

Reduced LU Administration

COMTI channels all host communications through TIEMA which eliminates the need to create potentially thousands of LUs for each end user in VTAM. COMTI, which communicates with the TIEMA via LU 6.2 or TCP/IP, becomes the only user as far as VTAM is concerned.

Multiple, Concurrent Host Applications and Sessions

CICS 3270 screens are presented to an application as COM method calls. In CICS, the state is normally lost when each screen's corresponding CICS transaction ends. TIEMA maintains the state between logical sequences of screens. Each sequence is allocated a unique "handle," which makes it possible for applications to process many sequences in parallel. COMTI can also handle multiple, concurrent host sessions.

Security

TIEMA leverages the IBM Resource Access Control Facility (RACF) security system to ensure that all access to host transactions remain secure.



Protect Existing Investment, Introduce New Technologies at Low Risk

The many new features being introduced with Microsoft Host Integration Server 2000 will make interoperation between Windows 2000- and Windows NT-based applications and existing host applications easier than ever before. TIEMA enables COMTI to extend the type of host application accessible from Windows with no need to modify those applications. Users can migrate at their own pace to new front ends because the applications can still be accessed directly from 3270 terminals. New technologies can be deployed at low risk onto existing, stable business processes thus extending their life and protecting the large investments made over many years.

System pre-requisites

TIEMA runs on IBM OS/390 Version 2, Release 4 or higher and requires CICS Transaction Server 1.3. The COMTI feature shipping as part of SNA Server 4.0 SP3 is compatible with the Software AG's TIEMA, although the new Microsoft Host Integration Server 2000 release is recommended.

