




**IBM Tivoli Monitoring 6.1 firewall implementation:
KDE Gateway component**

Overview of the KDE Gateway



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Overview

- **The KDE Gateway is a feature that** allows traversal of complex firewall configurations
- **The KDE Gateway is based on a new proxy component resident in the base ITM/OMEGAMON Platform processes: TEPS, TEMS, WHP, and TEMAs (agents).**
- **The service is** provided by the OS agent **at the service level and is** configured with XML.

Note: No product application changes or infrastructure changes are required to enable KDE_Gateway support

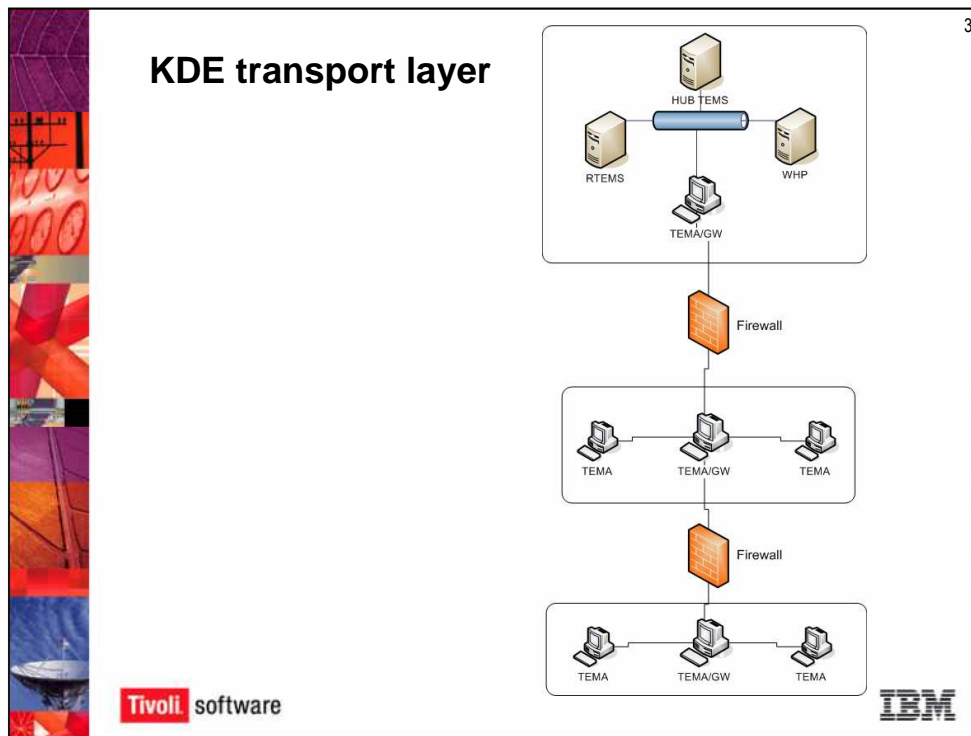
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Overview

The KDE Gateway feature allows the traversal of complex firewall configurations. It's based on a new proxy component, and it's present in the process for TEPS, TEMS, Warehouse proxy and the TEMA agents.

The service is provided by the OS agent, even though it does live in the KBB/KDE level, and it's configured within XML. You can use other agents. It's not recommended as a best practice. The best practice is to use the OS agent. The only agent I've really ever seen anyone use widely is the Universal agent because the Universal agent is provided with the platform and is maintained at the same level, in general, as the fix packs. That's why we don't recommend you use other agents that don't have the same fix pack level as the core components.

There are no product application changes. The same calls are made, which is nice, so you don't have to worry that your agents are updated. This is handled by the basic services. So as long as that's updated, you don't have to update your SAP agent or your DB2 agent. They understand how to communicate because that is provided in the base services.



KDE Transport Layer:

The Gateway is implemented in the KDE transport layer; it introduces a level of abstraction creating a socket-independent layer of “Monitor” calls.

A basic diagram of a simple scenario where you have a HUB TEMS inside your firewall. You have a firewall. You also have your TEMA gateway. An OS agent somewhere in that environment. Would not recommend putting it on the HUB TEMS, but you can put it on another machine. That machine can talk to that Remote TEMS you see or it can talk directly to the HUB. It also needs to be where it can talk to the Warehouse Proxy (WHP). In the in between zone you have another gateway to which agents within that zone talk to that gateway. That gateway is responsible for communicating with the gateway where the TEMS is located. This can continue on. You have another gateway. They talk to each other through the firewall. The gateways connects to each other. The agents connect to the gateway. That agent believes that that gateway is its TEMS. So it's talking to that gateway but in reality going straight up to the TEMS.

This provides a level of abstraction, so these individual agents within that zone do not have to understand how to traverse the firewall and how to set up socket connections through the firewall. They are going to that gateway which has a socket open through the firewall and up the stream.

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Overview (continued)

The diagram illustrates a network architecture. At the top, there are three server icons labeled 'TEMA', 'TEMA', and 'WPA'. Below them is a 'TEMA/GW' icon. This is connected to a 'Firewall' icon. Below the firewall are three 'TEMA' icons. This is connected to another 'Firewall' icon. Below this second firewall are three 'TEMA' icons. A red box on the right highlights two layers: 'TEMA/TEMS/WPA' (yellow) and 'KDE Transport Layer' (green). A red line connects the 'TEMA' icon in the bottom layer of the diagram to the 'KDE Transport Layer' box.

- The Gateway is implemented in the *KDE transport layer*. It introduces a level of abstraction creating a socket-independent layer of *"Monitor" calls*.
- Monitor call operations replace native socket operations in the KDE Transport layer. Native socket operations, in turn, are used in the socket-dependent layer to implement Monitor calls and KDE Gateway operations.

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The TEMA in the outer layer here is communicating through the KDE Transport. It's doing abstraction. It's creating the socket layer communication. It's not within the individual agent. So the monitor calls to collect data to connect to the warehouse proxy. It's still doing the same calls. It's not having to go through the firewall. That's provided by the gateway. The native socket operations are implemented within that gateway feature, not the agent themselves.

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