Teleca Multi Media Interoperability Suite

Building on the success of SMS, the use of MMS is taking off in GSM, GPRS, and UMTS. The use of MMS is expected to grow rapidly, as potential end-users are exposed daily to advertising. Mobile operators are also educating their customers about MMS and offering new MMS-related products and services. The highest priority for mobile operators is to provide top-level performance and reliability. Teleca MMI Suite allows you as operators to deliver high-volume MMS messaging and value-added MMS services.

How can you increase your business today?

With Teleca, the key partner from operator network to end user services.

Background

Teleca, thanks to many years experience in standardisation, development, maintenance and support of GPRS, GSM and UMTS networks, has designed the Teleca MMI Suite to address the challenges that you face in your mobile data networks.

Teleca MMI Suite provides the flexibility and the efficiency required to power tomorrow's mobile data opportunities. Our MMI Suite allows you to deliver high-volume MMS messaging and value-added MMS services through the use of multiple MMSCs. It's important that mobile operators deploy an MMS platform to support a wide variety of new income opportunities, technologies and partnerships, so that they can adjust their strategy quickly, but at same time this architecture has to be reliable without compromising their return on investment.

Teleca MMI Suite has been designed to offer full flexibility in the setup of multiple, special purpose MMSCs for MM1, MM3, MM4 and MM7 interfaces.

Performance and Interoperability

A MMS system must offer performance, scalability, flexibility and interoperability. A MMS user must be able to send messages anywhere, regardless of the recipient operator's network and type of handset.

The interoperability must consider the following aspects:

- Allowing data exchange with other operator systems, such as SMSC and e-mail servers.
- Accommodating different screen size, resolutions and supported formats.

In an MMS environment, network elements communicate via a set of interfaces specified in the scope of the European Telecommunications Standard Institute (ETSI) and the 3GPP standardisation activities. These standard interfaces restrict mobile phones to only communicate with one default MMSC and it is this restriction that greatly reduces flexibility and scalability of MMS based application.

Teleca is an international telecom and IT services company focused on R&D that develops and integrates advanced software and information technology solutions. With in-depth expertise in the latest technology and profound industrial knowledge, Teleca helps technology- and software-intensive customers worldwide to strengthen their market positions and shorten their times to market. The company has more than 3,000 employees and operations in 15 countries in Asia, Europe and North America. Teleca is quoted on the Attract40 list of the Stockholm Stock Exchange.

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Support for multiple MMSCs

Teleca MMI Suite has been designed to overcome this restriction and offers full flexibility in the setup of multiple, special purpose MMSCs for MM1, MM3, MM4 and MM7 interfaces.

Table 1 Implemented Interfaces

Interface	Description	Protocol
MM1	Interface between the MMS User Agent and the MMSC	HTTP WAP 2.0
MM3	Interface between the MMSC and MMS server	SMTP/IMAP
MM4	Interface between the MMSCs belonging to different MMS platforms	SMTP
MM7	Interface between the MMSC and value added services (VAS) applications	SOAP, HTTP

Our MMI Suite is able to address the correct MMSC using a routing policy that can be easily configured by system management.

Smart routing

Routing policy is a round robin based by default, but can be configured in terms of different parameters such as:

- Content type: messages are forwarded to a specific MMSC in terms of their content type (audio, video, etc.).
- Response times: messages are routed to the MMSC that has the minimum average response time.
- Message size: messages are routed in term of their sizes.
- Recipient MSISDN: messages are routed in terms of their recipients. For instance, even MSISDN are routed to a specific MMSC.

Transcoding support

Enabling universal access to multimedia content is important for the success of MMS. Universal access describes the way multimedia content is adapted to the constraints of another device. For example, if a phone has a screen size bigger than another, then the image has to be optimised in order to be properly displayed. Similarly if a phone supports GIF and the other supports JPG, the format would have to be changed and optimised in order to be displayed correctly. This tailoring process is called media transcoding.

Handsets may have different capabilities in supporting MMS encapsulation format. Sometimes it is necessary to perform adaptations in the MMS format before delivering it to the recipient device. This is called MMS format transcoding.

Teleca's MMS Transcoding solution will ensure that any content and/or encapsulation format in an MMS will be optimised to adapt to the receiving device. Transcoding can adapt rich media content, video, images, audio and text to the individual constraints of different devices. Transcoding directly affects what the end users see and hear. This means it is a reflection of the MMS service as a whole. Teleca provides the transcoding solution that is imperative to the success of MMS.

Legacy support

Our MM1P allows, according to configurable rules, to divert MMS to a Legacy Support System. This feature makes it possible for end users to view their MMS via a web interface in the event that the MMS is not suitable for their device even after transcoding.

Software packages

Teleca MMI Suite offerings include the following products:

- Teleca MM1P
- Teleca MM3P
- Teleca MM4P
- Teleca MM7P
- Teleca PPG

Supported Platforms

Our MMI Suite is based on Sun Microsystems Java 2.
Teleca MMI Suite runs on:

- Linux
- Solaris

Hardware requirement

Hardware requirement will be defined according to the total system throughput.