WEBTAMOS - EMERGENCY RESPONSE MODELLING IN THE WAN OF THE CENTRAL INSTITUTE FOR METEOROLOGY AND GEODYNAMICS

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The Central Institute for Meteorology and Geodynamics (ZAMG) developed an Emergency Response Modelling System, called TAMOS, which is operated at three Workstations at the ZAMG and at one Workstation at the Federal Alarme Centre of Austria.

This Emergency Response Modelling System makes it possible to carry out trajectory calculations and dispersion computations and to display and print out the results in graphical way.

The TAMOS-System is operated via a Graphical User Interface, which also was developed at the Central Institute for Meteorology and Geodynamics. In the Graphical User Interface integrated is the process-controlling for the trajectory-model and the dispersion-model, therefore it is necessary to have a complete installation of TAMOS on a SUN-workstation for a fully operational system.

In order to make it possible, to carry out trajectory calculations at computers which have not installed the TAMOS-system or the graphical user interface, there was developed a Web-Interface. This Web-Interface creates the possibility for every desktop computer, which is connected to the intranet of the ZAMG, to carry out trajectory calculations. This is important for the Regional Centres of the Central Institute for Meteorology and Geodynamics, which until now could not operate a full installation of TAMOS. It was not possible, because to operate the TAMOS-system, there is a high datavolume necessary, to high for the Datalines to the regional centres.

The new Web-Interface has the following advantages:

1) WebTAMOS can be used from the most today available webbrowsers.

2) The interface is written in JavaScript, HTML and Perl, and is centrally held on the intranet-server of the Central Institute for Meteorology and Geodynamics.

3) WebTAMOS is open for new developments and extensions in the future.

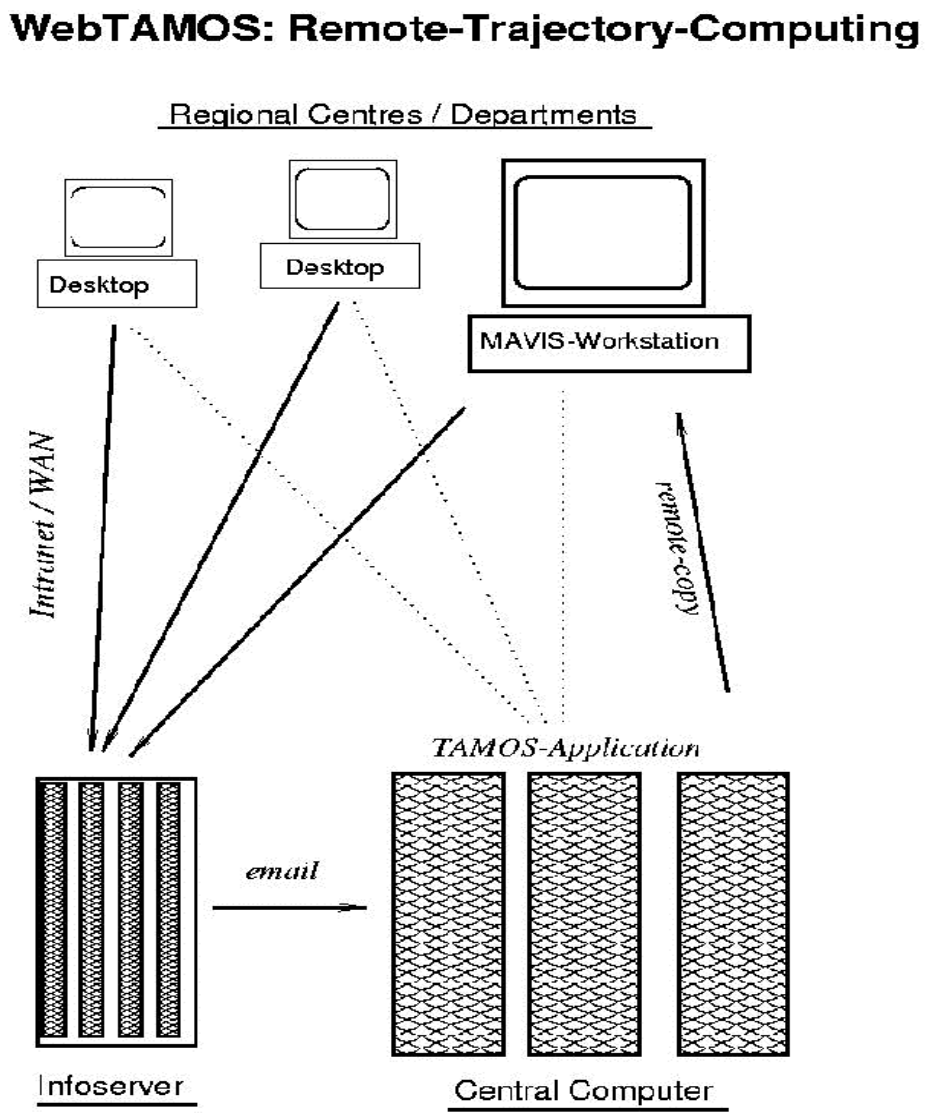

Figure 1 The basic Composition of WebTAMOS

The Desktop computer loads the Web-Form from the Infoserver. In this form the data for the requested trajectories is put in. The data is checked for consistency.

If the check is okay, then an e-mail with the trajectory request will be sent to the centralcomputers at the ZAMG.

At these computers a program checks the e-mail, configures the trajectory calculation and starts it.

There are threedimensional trajectories on basis of the ECMWF data calculated.

After finishing the calculation of the trajectories, there will be sent an e-mail to the requesting department or regional centre of ZAMG.

The trajectories are sent to the MAVIS-Workstations of the requesting department or regional centre by remote copy.

For the representation of the calculated trajectories there exists a visualization-software, named MAVIS, which is a development of the Central Institute for Meteorology and Geodynamics. This software runs only on SUN-Workstations and Linux-Workstations.

Possible future developments:

WebTAMOS can be extended to produce graphical representations of the calculated trajectories. In this case the result can be shown in the browser at the desktop computer and one do nont need a MAVIS-Workstation.

Furthermore can be made an extension for dispersion calculations with selection of the graphical representations, which will be sent to the requesting computer.