

ModCBroker: General description

DocumentId:GradSoft-Cbroker-e-G502-78-14.05.2000-2.0.0

October 15, 2008

`$Id: Description_eng.tex,v 1.12 2007-06-14 11:47:14 rssh Exp $`

Module is intended for transparent translation HTTP requests into CORBA requests to server engine. Calls of cbroker servlets can be embedded into web pages or scripted web interfaces.

With **ModCBroker** it is possible to create WWW interfaces layer in general CORBA infrastructure of enterprise information system and clearly separate interface and business logic.

It considerably reduces administration time, removes problems of incompatibility WWW server and data source (i. e. you can free plug Oracle on Sun server or MS Sql on Windows NT with FreeBSD WWW from end), allows to organize handling of http requests without usual CGI overhead, allows naturally integrate www front-end into general infrastructure of CORBA framework.

In general, architecture of WWW front-end, which builds using **ModCBroker** looks as shown below:



`mod_cbroker` is written on C/C++, CORBA servlet can be written on any language, for which CORBA binding exists.

0.1 Functional characteristics

Complex provides:

1. Translation of WWW requests to CORBA requests, according to IDL specifications, without spawning of external process for each request.
2. Localization of using CORBA servlet by URL name, beginning from directory prefix in URL URL, (which set in config file of Apache) via CORBA Naming Service. More detailed: let URL is: `http://host-name.com/x/y/z`. Then, Apache module check:

- if `—x—` is set as cbroker directory in config,

- if yes – get from NamingService servlet *y*, which is bound in Naming Contexts `HTTPServ` (i. e. `id="HTTPServ", kind=""`), under `RootNamingContext`,
 - check permissions (ask username and password if necessary)
 - call handler *z* in servlet *y*.
3. Arguments for initializing of ORB, built into `CBroker` are set in config file of WWW server by variable `<ORB_args>`

1 Documentation Set

1. General Description.
2. Programmers Guide.
3. Administrator Guide.
4. List of Changes.

2 Supported platforms

1. OS: UNIX (Sun Solaris, Linux, FreeBSD) or Windows NT
2. ORB : MICO, ORBacus-4.x (TAO, OmniORB, VisiBroker-4.5, Orbix/E - by request).
3. web server : Apache `httpd-2.2.x`

3 Changes

- 13.06.2005 - review.
- 10.02.2003 - review.
- 21.05.2002 - review.
- 02.06.2001 - review.
- 30.01.2001 - review, formal document tracking attributes added.
- 09.06.2000 - created.