

AE BROADCAST: INSTALLATION REQUIREMENTS AND CONFIGURATIONS

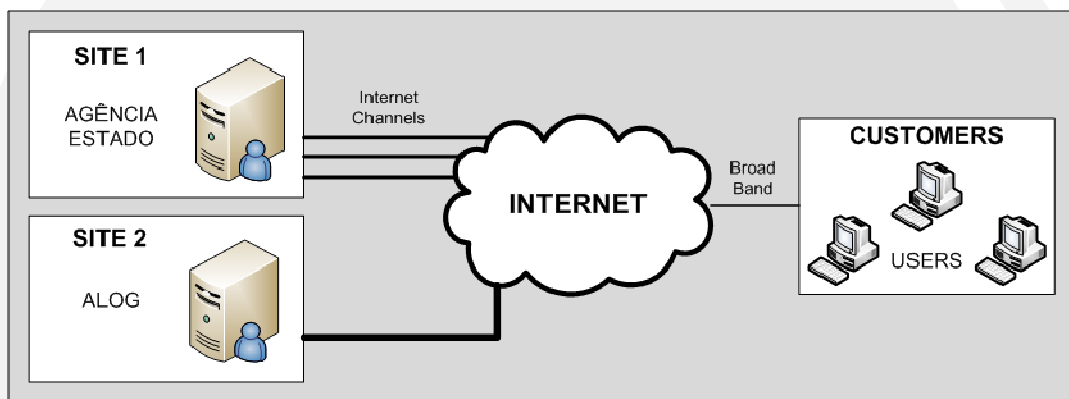
AE Broadcast

Pioneer in financial information and leader in the Brazilian market, AE Broadcast is a comprehensive, precise and reliable system that provides real time news, stock and commodities quotations, analyses, tools and graphs integrated on a single platform. We provide all of this functionalities to those who need agility and credibility for their decision making process about investments.

System Architecture

The AE Broadcast's architecture is based on the "Client-Server" connection. There is a client application installed in the user's desktop, called AE Broadcast, which communicates itself with the **e-bc** servers.

The client AE Broadcast is responsible for starting and ending the communication with the **e-bc** server. The proprietary communication protocol runs encapsulated in the Internet Protocol (IP), in unicast mode and also with fixed port TCP datagram.



The client-server connection is kept during all the service utilization time, however, in the case of loss of connection with the server, the client software automatically will make a new connection with other **e-bc** server.

Recommend requirements for AE Broadcast installation

- Processor: Intel Pentium 4,3 Ghz
- RAM Memory: 1 GB RAM
- 25 MB available hard disk space
- Operational System: Windows XP, Windows Vista or Windows 7 *
- Browser: Internet Explorer 6
- Recommended video resolution: 1024 x 768 pixels
- Internet Access: 512 Kbps **

* Operating Systems tested by Agência Estado to run AE Broadcast properly. Systems running on VM (Virtual Machines) are not approved.

** 50Kbps is the bandwidth average usage and it can vary depending on the amount of services acquired, exchange traded volume and available resource usage.

Firewall configurations in order to access the system and the services

| Service | Connection origin | Ports | Type | Connection Destination |
|--------------|-------------------|----------------|------|------------------------|
| AE Broadcast | User station | 44700 to 44800 | TCP | 200.196.192.0/19 |