AccessGrid Node PC Firewall Configuration

This document describes the process of configuring the firewall on a Windows XP AccessGrid Node PC.

The firewall built into Windows XP operates at the application layer. This means it creates rules permitting applications, or programs to initiate external connections to allow the transfer of data in each direction. So an example of this is a rule that gives the AG Toolkit client permission to connect to an AG Toolkit server so that it can transmit and receive audio and video data. Such a rule allows the program to use any TCP or UDP port it wishes.

When an program that needs to make an external connection is run for the first time on a Windows XP system, the Windows Firewall (which blocks everything by default) will issue a security alert message asking whether you want to unblock that program. You give that program permission by clicking on the 'Unblock' button. This permission will then be stored as a firewall rule, therefore giving the program automatic rights to make external connections in future.

AG Toolkit Users

The screen shot below shows an example of when AG Toolkit is first run. AG Toolkit is based on python software modules, in particular the **pythonw** program. So as seen below, it's actually **pythonw** that is trying to make an external connection. When AG Toolkit is first run, a pop-up Security Alert window appears. This is pythonw trying to make a connection to the server. Click Unblock to accept this action, since it is safe to create a firewall rule for the pythonw program. Note – You will only need to do this once, since the firewall rule is stored on your system.

The Windows Firewall Rule for the AG Toolkit client.

IG Meeting Users (IOCOM)

When IG Meeting is running, there are three separate programs that need to connect to the IG server: IGVideo.exe, IGAudio.exe and IGTools.exe. Each of these programs will need access through the firewall. Therefore, when IG Meeting is run for the first time, Windows Firewall will issue three alerts asking you to allow those programs to make connections, i.e. to unblock them. The following Security Alert will appear in pop-up windows as each program tries to gain access through the firewall. Click Unblock' for each pop-up window to allow these programs to run:

The Windows Firewall rule for the IGVideo component within IG Meeting.

The Windows Firewall rule for the IGAudio component within IG Meeting.

The Windows Firewall rule for the IGTools component within IG Meeting.

In all the above cases, the firewall setup will be the same whether your AccessGrid client makes a 'Multicast' or 'Bridged' connection to the meeting.

Please note that this document only covers the firewall configuration requirements of the AccessGrid node PC. Virtually all networked institutions (including your ADSL router at home) have a firewall somewhere within the vicinity of the gateway. The firewall configuration at this level is covered by the document "Configuring the Institution Firewall for AccessGrid traffic".

End of document.