

Survival Guide to Access Grid Node (AGN) Meetings.

Before the meeting:

Find out which virtual venue the meeting will take place in.

For the time being (in the absence of multicast), a 'bridge' is needed to get into the different venues. The AGN equipment is set up to use the Access Grid Support Centre (AGSC)'s bridge by default, but an alternative bridge may be arranged by a participant in the meeting who has multicast.

(If using a bridge other than Manchester's, details will need to be obtained prior to the meeting; including a venue address and port numbers for audio and video – see 'using a manual bridge' in the further details section at the back of this guide).

If Microsoft PowerPoint presentations are being made at the meeting, the presenters should bring these to the meeting on disk, CD or USB memory stick.

Setting up the meeting:

If you are setting up the meeting yourself, keys to room S222a will be available from the reception of the Institute of Ancient History & Archaeology (IAA) Field Unit, round the corner from the AGN room.

Practicalities:

- *Lighting:* For Conferencing, the black-out blinds should be lowered and dimmable lighting used as appropriate. There are two circuits for the lighting, one for the front of the room and one for the back. It may be necessary to have the front lights dimmed slightly more to allow the screen itself to be seen clearly.
- *Microphones:* The AGN room is equipped with 8 microphones, 2 overheads and 6 tabletop. The tabletop microphones need to be pointing in the correct direction to pick up. Place the required microphones close to the seating positions of speakers with the wider part of the microphone's base facing the speaker.
- *Cameras & Chairs:* The cameras automatically focus on closer objects, therefore if chairs on the screen-side of the conference table are not being used, these should be moved to the side of the room to give a clear view of participants and allow good focusing.

Powering Up: On the cube itself there is a red power switch on the back. Both this and the Dell computer will need to be turned on first (along with the flat-screen monitor). Secondly, the projectors will need to be powered up. This can be done for both projectors by remote control, pressing the standby button then 'RGB' button on the control to select the correct input. Thirdly, the speakers will also need to be turned on; there are power switches on the front of each speaker.

Logging In: Once the computer is on, a Login box will appear on the flat-screen monitor, this is the control screen. Login details are as follows:

Username: mesc
Password: escience

(It will often be convenient to have this control screen on the conference table itself, along with the keyboard and mouse. The connection cable is long enough to allow for this to be done, but the monitor will have to be powered from a nearer plug socket).

Jabber / Text Chat: To help resolve any problems that might occur during meetings, a text-chat programme is used by the operators to communicate with each other, without disturbing the meeting itself. Since January 2005, 'Jabber' is the default text-chat facility being used in Access Grid Node meetings.

On the desktop of our AGN machine there is a 'Ψ' (psi) symbol; this shortcut opens up the jabber programme to allow text chat between operators. For the basics of using Jabber text chat, please see the 'further details' section at the back of this guide.

Getting to the Virtual Venue:

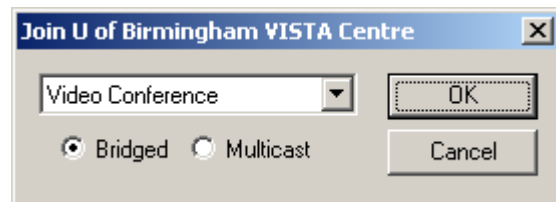
- Navigate to Access Grid Support Centre (AGSC)'s server site (<http://virgo.agsc.man.ac.uk>).
- A user name and password should already be entered by default, but if this is not the case enter the following when you are prompted; Username: **uobirs222a**, Password: **3tekaspe**.
- From the drop-down lists, select the virtual venue where the meeting will take place (usually under the *institutions* heading)*
- Click on the **bridged** button next to the selected virtual venue.
- The InSors software will now load and you will enter the meeting **with all microphones muted**.

*If the venue for the meeting is somewhere other than those listed in the drop-down menus, a manual bridge will need to be used to get to the venue. See the detailed section at the back of this guide for guidance on using a manual bridge.

Alternative shortcut to frequently used venues:

There is a blue IGINstant icon in the set of icons at the right of the taskbar at the bottom of the screen on the control monitor. Right-click this and select your desired virtual venue from the *Favorite Rooms* list.

The software asks for the type of conference - accept the default Video Conference and Bridged options. You will then be prompted for an encryption key; if a key has been issued beforehand for the meeting, to stop anyone who may come into the Virtual Venue overhearing the meeting, enter it here. If none has been agreed the meeting will be open to anyone who comes into the Virtual Venue.



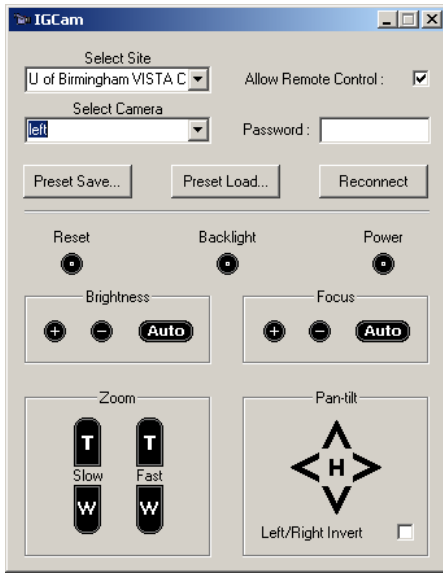
The inSORS software will now load and you will enter the meeting **with all microphones muted**.

Controls during the meeting:

On entering the virtual venue, thumbnail video images from the different participants cameras should appear on the left-hand projector screen. These images can be moved, enlarged or disposed of as necessary. Take some time to re-arrange and re-size these video images as you wish.

To enlarge or shrink an image, highlight that image and press 'L' (large), 'M' (medium) or 'S' (small) on the keyboard for the desired image size. To dispose of an image that is not required: simply double-click on the image or drag it off-screen. (The image will still be available in the thumbnail window on the main display).

Cameras: To access the camera controls, the *IGCam* box will firstly need to be brought up on screen. This can be done by right-clicking the purple IGTtools icon in the set of icons at the right of the taskbar at the bottom of the screen on the control monitor. A menu of options should appear. Select *IGCam* from this menu and the screen shown below should appear:



Firstly, select the local site (Midlands e-Science Centre - Birmingham), from the *Select Site* drop-down menu. This allows control of the site's cameras.

To use one of the presets, click on 'Preset Load'. From this menu, different preset options can be selected.

To manually adjust cameras, select one of the 4 cameras from the *Select Camera* drop down box and use the *Pan-tilt* and *Zoom* functions at the bottom of this box to alter the settings.

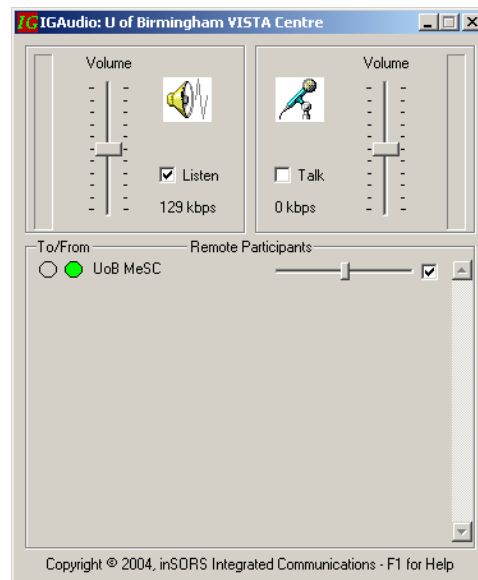
(For more detailed information on how to alter camera settings from this panel, including zoom controls, backlighting and setting presets, please see the section on cameras to follow.)

Microphones & Speakers: These should already be preset to a good level, but if the overall level should need to be increased or decreased, this can be done from the IGAudio control screen, which will appear on-screen when entering a conference room.

The volume of the room's microphones can be controlled using the slider on the right, and the volume of the room's speakers can be controlled using the slider on the left.

Below these two slider controls, the Node List displays the other individual nodes transmitting audio within the virtual venue. From these slider controls, it is possible to change or mute the audio volume from individual nodes.

Individual microphone volume: A simple and practical way of accommodating for volumes of different speakers is to move the uni-directional table microphones closer or farther away from the speaker as appropriate.



PowerPoint Presentations:

Practicalities: On the Front of the Dell computer that runs the access grid software, there are USB ports along with a floppy drive and CD-Rom drive for those bringing presentations to the meeting.

The Insors software includes its own IGPix application that allows images and Microsoft Powerpoint presentations to be displayed on a www server. IGPix captures images off your primary display (This will be the flat-screen display with the taskbar and icons on it.)

Sending a Presentation

Firstly, you will need to notify the other participants in the virtual venue where the server for your IGPix presentation will be. All participants viewing a presentation from this node at Birmingham should be directed to the address: (<http://virgo.agsc.man.ac.uk/igpix/uobirs222a>).

Using IGPix with MS PowerPoint

If you run your PowerPoint presentation in *View Show* mode, IGPix will **automatically** capture the slide images during slide transitions; you do not need to manually update.

NB: IGPix only captures still images, so effects such as sounds, video, animations and transitions will not be included. (The mouse pointer is also not transmitted). To capture a PowerPoint presentation in *View Show* mode:

- Open your MS PowerPoint slide show file
- In the Slide Show menu, select View Show.
- Advance slides by clicking the cursor on the projection-screen display.

If other nodes are running inSORS software, you can use **IGWeb** from the purple IGTools menu to “push” the IGPix website address to them in a new browser window:

- Click on the purple IGTools icon
- Select IGWeb from the list
- Click Get IGPix URL
- Put a check in URL Sharing Active

Viewing a Presentation

To view an IGPix presentation, you will need to open a web browser to the IGPix site address. If you are using an IG Node and the other user is as well, you can ask them to send it to you via IGWeb (see above).

When the web page is opened, click Join Presentation. You can minimize this window. A new browser window will open to show a blank, or *Waiting for Presenter*, until the presenting node sends a new image.

Coordinating Multiple Presentations

Only one node can present via IGPix at any given time. When one node is finished sending their presentation, all nodes should close their open presentation and “join presentation” browser windows. The next presenter should supply their IGPix presentation address or push it via IGWeb.

Using IGPix to capture images from your desktop

To capture a screenshot of the primary display:

- Left click on the yellow IGPix icon in the task bar.
- The icon near the clock will change briefly during the capture.
- The image is sent via the Internet to the IGPix Viewing URL as seen in the configuration screen. (Note that IGPix only captures the primary display).

Leaving the meeting: Either click the IGInstant icon and select *Exit Meeting*, or from the Access Grid Support Centre (AGSC)’s server site, click on the **Room Exit** button.

FURTHER DETAIL SECTIONS.

Using a Manual Bridge:

Not as complicated as it sounds. All you need are the details of the bridge that you wish to use. From the screen that appears once logged into the Access Grid Support Centre (AGSC)'s server site (<http://virgo.agsc.man.ac.uk>), select the green **Manual Bridge** button on the right hand-side of the screen. This will take you to a different screen where you need to enter:

- The IP Address of the bridge that you wish to use
- The video port number that you wish to use
- The audio port number that you wish to use

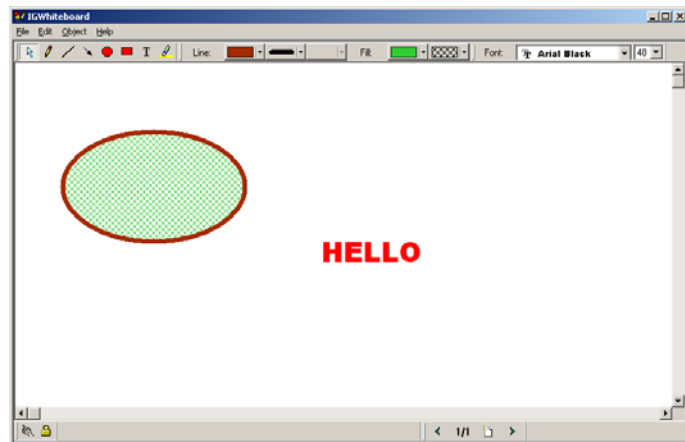
If using a venue not on the drop down lists given, these details should have been passed on to you in advance of the meeting.

Other options form the IGTools menu:

IGWhiteboard

Opens a shared whiteboard, where all participants can access and edit content. Simply select IGWhiteboard from the IGTools menu. The shared whiteboard opens:

Various tools are available, including a text tool and drawing objects. When joining a meeting that is already using the whiteboard it may be necessary to update the local copy by selecting the *Request Update* option from the *File* menu



IGWeb

Briefly mentioned earlier as the means by which the IGPix website address can be “pushed” in a new browser window to participants in a meeting. This function can also be used to “push” other web pages to participants:

- Click on the purple IGTools icon
- Select IGWeb from the list
- Enter the web address of the page that you wish to “push”
- Put a check in URL Sharing Active

IGFile

This function allows the sharing of files with other participants in a meeting.

- Click on the purple IGTools icon
- Select IGFile from the list
- Either enter the file name directly or browse to the file that you would like to share
- Click on the square next to the file name to allow access by other participants

Powerpoint presentations:

Extra IGPIx Options:

Extra options are available with IGPIx once the basics have been grasped. By right-clicking on the minimized IGPIx icon these options can be used:

- Visible Update Button – when checked, this displays a large update button on the desktop.
- Auto-update – IGPIx will capture your desktop image automatically in the interval you specify here.
- Viewing Password – requires other viewers to enter a password before being able to view your IGPIx presentation. Note the username and password on the configuration screen... these will both need to be supplied to anyone who wishes to view the presentation.

Configuring IG Pix

Should IGPIx need to be re-configured to a different server:

- Right-click on the IGPIx icon in the system tray and select Configure IGPIx.
- Enter the IGPIx Server URL (e.g. for the AGSC IGPIx server:
<http://virgo.agsc.man.ac.uk/igpix/>)
- Click on the IGPIx User ID button
- Enter in your IG Pix User ID and password as requested.
User ID: (e.g. for the AGSC IGPIx server: **uobirs222a**)
Password: (e.g. for the AGSC IGPIx server: **3tekaspe**)
- Click OK.
- Check Enable IGPIx.
- Click Hide when done configuring IGPIx.
- The URL (web page address) for viewing the images you are creating with IGPIx should appear in the IGPIx Server URL field.

Cameras:

Further Details on Cameras:

'Allow Remote Control' Box: If this box is ticked for the MeSC site, then other participants in the conference can alter the MeSC camera settings remotely (A password can be set on this function that means only those who know the password will be able to alter these camera settings remotely).

Preset Save: This is the control by which presets can be set on Camera angles, focus, backlighting etc. To save a preset, simply set up the cameras as desired then press this button and, when prompted, enter a name for your preset.

Preset Load: this is the control to load up a set of presets that have already been saved.

Reconnect: If there are problems with controlling a particular camera, this button can act to re-establish a connection to the camera.

Reset: Hitting this button resets the selected camera to the preset setting, e.g. if a desired preset is loaded but then the settings on a particular camera are changed to focus in on a particular speaker, this button will reset the camera back to the original preset setting.

Brightness: The *Auto* function here often serves to solve any problems with brightness, but if necessary this setting can be altered manually.

Focus: similarly, the *Auto* function here often serves to solve any problems with focus, but if necessary this setting can be altered manually. Note: When setting camera positions, the cameras will focus best when there is as little white space at the top of the screen as possible. This allows a good contrast in the foreground image.

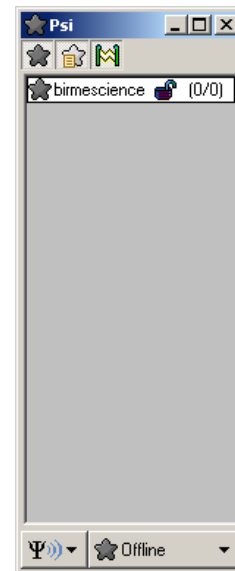
Using Jabber text chat:

The particular type of jabber service that we are using is named 'Psi' (hence the symbol on the desktop). Clicking on this symbol on the desktop will present you with a log in screen.

A default username and password have been set up for use during AGN sessions, these are:

Identity: birmescience
Password: escience

Logging in using this identity will bring up the box shown here on the right.

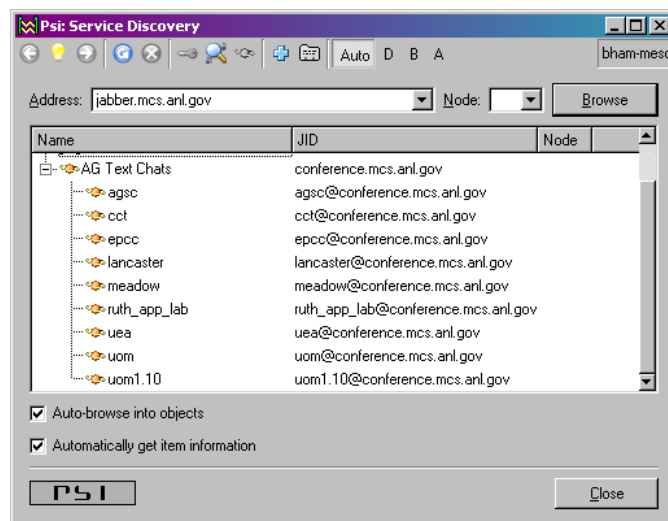


- Using the button on the bottom right-hand side of this box (showing here as 'Offline'), click on the 'online' option that is presented and Psi will connect to the server. (The grey star will turn yellow once Psi is online).
- Once connected, click on the button on the left hand-side at the bottom of the box (marked with the 'Ψ' symbol) and a number of options will be presented to you on a drop-down list. Select 'Service Discovery' from these options and another box will appear (similar to the one pictured below).

- This box will initially present you with 3 different destinations:

1. **Jabber 1.4 server**
(jabber.mcs.anl.gov),
2. **Access Grid Jabber User Directory** (jud.jabber.mcs.anl.gov),
3. **AG Text Chats**
(conference.mcs.anl.gov).

Click on *AG Text Chats* and a list of destination chat rooms will appear as shown opposite. If you then click on the appropriate meeting room, you will be presented with the option of specifying a name that you would like to appear under in that room (nickname).



After specifying a nickname, you will enter the room and be visible to others in the room. To communicate, it is simply a case of typing in the space provided and hitting 'enter' to send you typing to others in the room.

Troubleshooting - Audio

I'm not receiving any sound from the other node. What can I do?

Follow these steps to check your audio setup:

1. Check power and connections to the speakers.
2. If the room you were entering requires encryption, verify that your node and the other nodes are entering using the same key (case sensitive).
3. Check to make sure the IGAudio has started. If it hasn't started, try re-entering the room.
4. Verify that the Speaker meter is showing activity. If Speaker meter is active, verify sound is going to sound card by temporarily connecting a head set directly to the lineout/speaker port of the sound card.
5. Verify that the Speaker is the selected Output device over the Listen section of the IGAudio window.
6. Make sure that the remote node is active on the IGAudio node list. The diamond next to their name should be green if the transmission is functioning normally. Verify that the check box next to the node is not checked, as this mutes incoming audio and puts a red stripe through their name on the list. If the node is not on the list, have them re-enter the room.
7. If IGAudio is displaying grey, orange or red for connections from the other node, network problems may exist. Contact your site administrator.
8. Using the Windows Mixer volume controls, make sure the master volume and wave levels are not muted or set to zero. You may need your site administrator's assistance to do this.
9. Check your Windows Task manager (CTRL+ALT+DEL should open it) and see if a second IGAudio session is running. If so, end task on each IGAudio application, exit the room and re-enter it.

The other node is not receiving my audio. What can I do?

Follow these steps to check your audio setup:

1. If the room you were entering requires encryption, verify that your node and the other nodes are entering using the same key (case sensitive).
2. Check to make sure IGAudio has been started. If not, re-enter the room.
3. In IGAudio, verify that talk is selected.
4. Verify that the Line-In meter is moving when sound is generated. This shows that the computer is receiving the sound locally and will attempt to send out to the other end.
5. If no meter movement, verify that sound is entering the card by temporarily connecting a different microphone directly to the line-in or microphone port of the sound card. If the meter moves, the problem is likely a fault in the sound input equipment.
6. In the Windows sound properties, verify that the line in recording levels are not zero or muted.
7. If your meter is moving but remote side does not hear anything, verify that their speaker meter is moving. This will demonstrate that the sound has been transmitted across the network and received by the remote end.
8. Make sure that the remote node is active on the IGAudio node list. The diamond next to their name should be green if the transmission is functioning normally. Verify that the check box next to the node is not checked, as this mutes incoming audio and puts a red stripe through their name on the list. If the node is not on the list, re-enter the room.
9. If IGAudio is displaying grey, orange or red for connections to the other node, network problems may exist. Contact your site administrator.
10. Check your Windows Task manager (CTRL+ALT+DEL should open it) and see if a second IGAudio session is running. If so, end task on each IGAudio application, exit the room and re-enter it.
11. Check connections to the microphones.

I'm in a conference and I am receiving an echo of my own audio from the remote side.

Audio echoes are caused by sound from the speakers being fed back into the local microphones. There is echo-canceling equipment fitted that should prevent this.

When you are hearing your own audio echoed back to you, it is a remote site that is the source of the problem. The site causing the echo does not hear the echo. Using IGAudio, mute the individual sites in the node list until your audio is no longer echoed. The muted site is causing the echo.

If the remote node is using an echo cancellation device and you can hear echo, have the remote side reset the device by unplugging the power for a few seconds and plugging it back in. A chirp will be heard through the local speakers as the ECD adjusts to the local ambient noise.

Echo issues can be very complex to troubleshoot. If resetting the echo cancellation device does not correct the problem, it will be necessary to contact inSORS technical support.

I hear my own audio coming back to me from my speakers.

This happens when Line-In is available as an audio output source. You may require your site administrator's assistance to correct this problem.

1. Go to Start Menu > Settings > Control Panels
2. Open the sound and multimedia control panel
3. Select the Audio tab
4. In the Sound Playback section, click on volume
5. Make sure that the Mute checkbox below line in is checked. Close the window when done.

Troubleshooting - Video

I'm not receiving video from another node. What can I do?

Follow these steps to check your video setup:

1. Make sure the area you are trying to display video in is on and no windows are covering the desktop there.
2. If the room you were entering requires encryption, verify that your node and the other nodes are entering using the same key (case sensitive).
3. Verify that you are in a room with other participants using IG Locator.
4. Check the thumbnail display to see if the other nodes are displaying video. Click on the video images in the display to open them in individual windows.
5. If video windows are present but blank or blue, have the other node check the connections to their cameras and verify that the software is configured to use the correct connector.
6. Use the Layout interface to establish an auto-layout area for the video windows.
7. If the other side is using a single computer system as a node, verify that they are transmitting video in the Image control section.
8. Network problems may exist. Contact your site administrator.

The other node is not receiving my video. What can I do?

Follow these steps to check your video setup:

1. If the room you were entering requires encryption, verify that your node and the other nodes are entering using the same key (case sensitive).
2. Check your Thumbnail Display to make sure the camera(s) from your node are displayed. If no video is seen, re-enter the room. If your video can be seen, then you are sending video.
3. Check the Image Control section of the Thumbnail Display to make sure you are transmitting video.
4. If video windows are present but blank or blue, check the connections to your cameras and verify that the software is configured to use the correct connector.
5. Exit the room and run IGConfig.
6. Network problems may exist. Contact your site administrator.

My video windows are all small sized, how do I make them larger?

To change sizes of the displayed window, select the window and press S for small, M for medium and L for large.

The video image from my room is showing up in black & white on my single server node.

1. Exit the virtual conference room.
2. Open IGConfig from Start Menu > Programs > inSORS video collaboration
3. Select Video Source for the camera and make sure the proper connection type is selected.
4. Close the window to return to IGConfig.
5. Select Video Format. Make sure that your camera is using YUY2 or YUV12/I420 as the compression.
6. Close the window and exit IGConfig when done.
7. Re-enter the virtual conference room.

I see a grey border around my camera image and/or the camera images from other rooms.

InSORS software is optimized for capturing at 352x288, and will display a gray border around images at smaller resolutions. Your camera may not support 352x288 as a resolution.

To set the resolution to 352x288:

1. Exit the virtual conference room.
2. Open IGConfig from Start Menu > Programs > inSORS video collaboration.
3. Select Video Format.
4. Set the image size to 352x288.
5. Close the window and exit IGConfig when done.
6. Re-enter the virtual conference room.

Some of the camera images are displaying as a solid blue or black screen or are scrambled. What is wrong?

This occurs when a loose or incomplete cable connection exists between the camera and the video capture card, or the incorrect video input type is selected on the capture card. It is also possible the camera itself is faulty.

1. Check the cable connection at the camera and at the PC to make sure the cable is secure.
2. Make sure that the camera is powered on.
3. Disconnect the camera and connect it to a cable that is running to a functioning camera, if one is available. If the camera functions on the new cable, the other cable must be faulty or have a break in the connection.
4. In IGConfig, click Show Video on each device until you locate the faulty camera entry. Click in the Video Source section to make sure the correct settings are in place. Contact your Site Administrator or inSORS technical support for assistance if necessary.

Troubleshooting - Other Problems

I am trying to exit a room but the web page doesn't seem to be doing anything.

The blue status bar at the bottom indicates the progression of the room exit. Please be patient, as some network delays may be preventing the exit from completing in a timely manner. It is possible that you may have a temporary loss of network connectivity, or the Venue Server might be unavailable. Contact your site administrator if problems persist.

I can't move the camera in IGCam.

1. Try using the IGCam controls for the other cameras to see if they respond.
2. Verify that the cables are properly connected to the cameras.
3. Click the reconnect button to rescan for cameras on the selected node.

Support

inSORS Technical Support

Local support for the Grid node is provided by Paul Hatton of Information Services who is contactable on extension x43994 or by e-mail at P.S.Hatton@bham.ac.uk. (There is a telephone in the AGN room with internal call access). Please note that there is not a permanent member of staff with a role devoted to support of the Access Grid Node.

Stephen Wilkes in the Institute of Ancient History & Archaeology (extension 44092) has also kindly offered to be available to help in case of emergency.

For further assistance, you can reach inSORS Support at +1 (312) 786-9169. Support lines are available from 8:00am to 5:00pm Central Standard Time (**1.00pm to 10.00pm Greenwich Mean Time**), Monday to Friday except holidays.

(Please note that a code is needed to make international calls from the telephone in the AGN room. This is available when booking the room by contacting s222abooking@bham.ac.uk. The costs of calls will unfortunately have to be met by the users of the room).