PLACES & SPACES

MAPPING SCIENCE

Exhibit Installation Guide

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Contact Information

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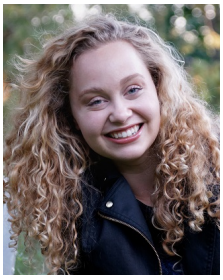

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List of Crates

Installation Tools Needed:

- » Phillips screwdriver
- » Hammer (depending upon wall material)
- » Velcro (depending upon wall material)
- » Cordless drill
- » Tape measure
- » Level (laser if possible)
- » Screws or nails
- » 7/32" hex key
- » Security hex key

Crate 1 of 12
Dimensions: 72" x 36" x 30"
(183cm x 91cm x 76cm)
Contents: Iterations 1-2
Weight: 270 lbs.

Crate 2 of 12
Dimensions: 37" x 34" x 37"
(94cm x 87cm x 94cm)
Contents: Iteration 3
Weight: 176 lbs.

Crate 3 of 12
Dimensions: 45⅜ x 35" x 34¼
(116cm x 89cm x 87cm)
Contents: Iteration 4
Weight: 244 lbs.

Crate 4 of 12
Dimensions: 45⅜ x 35" x 34¼
(116cm x 89cm x 87cm)
Contents: Iteration 5
Weight: 244 lbs.

Crate 5 of 12
Dimensions: 45⅜" x 35" x 34¼"
(116cm x 89cm x 87cm)
Contents: Iteration 6, 3 mac minis, power adapters, and cords
Weight: 241 lbs.

Crate 6 of 12
Dimensions: 45⅜ x 35" x 34¼
(116cm x 89cm x 87cm)
Contents: Iteration 7
Weight: 220 lbs.

Crate 7 of 12
Dimensions: 45⅜ x 35" x 34¼
(116cm x 89cm x 87cm)
Contents: Iteration 8
Weight: 218 lbs.

Crate 8 of 12
Dimensions: 45⅜ x 35" x 34¼
(116cm x 89cm x 87cm)
Contents: Iteration 9
Weight: 210 lbs.

Crate 9 of 12
Dimensions: 45⅜ x 35" x 34¼
(116cm x 89cm x 87cm)
Contents: Iteration 10
Weight: 221 lbs.

Crate 10 of 12
Dimensions: 50" x 44" x 42"
(127cm x 112cm x 107cm)
Contents: Additional Elements, Map labels for Iterations 1-3
Weight: 349 lbs.

Crate 11 of 12
(plastic footlocker)
Dimensions: 24" x 22" x 38"
(61cm x 56cm x 97cm)
Contents: 3 *WorldProcessor* Globes
Weight: 67 lbs.

Crate 12 of 12
(black wheeled case)
Dimensions: 37"x 47"x 27"
(94cm x 120cm x *69*cm)
Contents: Touchscreen Kiosk
Weight: 350 lbs.

Total Crate Weight: 2810 lbs (1275 kg)

Suggested Layout

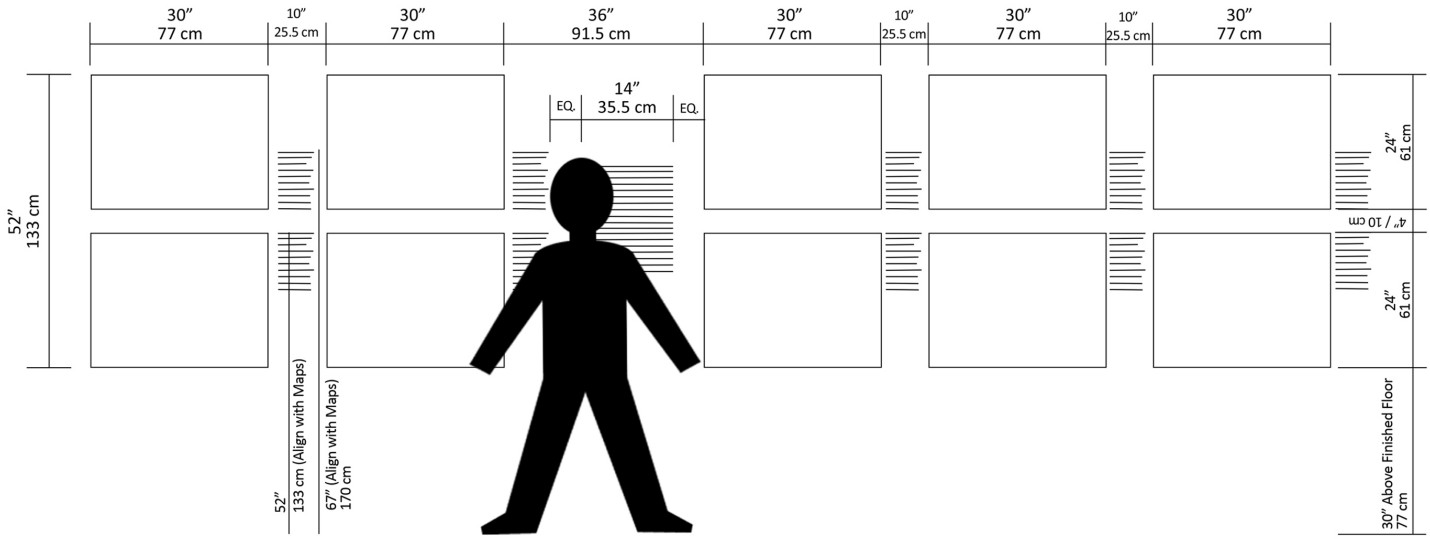


Fig. 5.1
Suggested layout of one iteration of maps

The *Hands-on Science Maps for Kids* should be displayed on a table. They are 18 in. (45.72 cm) tall, 12 in. (30.48 cm) deep, one is 18 in. (45.72 cm) wide and the other is 28in. (71.12 cm) wide (see figure 6.1).

The *Illuminated Diagram* (ID) is comprised of two high-resolution prints on ding paper that are attached to two LCD screens. A touchscreen lectern allows a user to interact with the LCDs (see Figure 6.2).

The *WorldProcessor Globes* have a diameter of 12 in. (30.48 cm). The stands should be adjusted so that the top of the globe stands no higher than 5 ft. (1.53 m) from the floor, which allows people of varying heights to enjoy them easily (see Figure 6.3).

The *Macroscope Kiosk* consists of a touchscreen kiosk with screen, stand, and computer. The kiosk is 52 in. (132 cm.) tall, 42 in. (107 cm.) wide, and 29 in. (74 cm.) deep (see Figure 6.4).

The exhibit also includes an **introductory panel**, **compare & contrast panels** (one per iteration), and **labels** for all elements of the exhibit.

Suggested Layout (cont.)

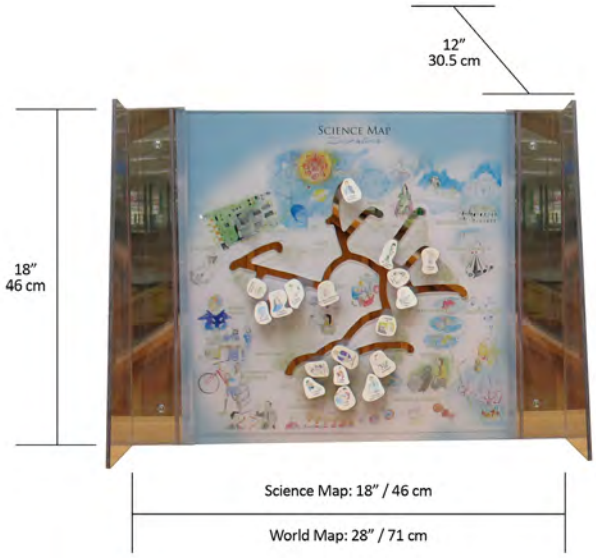


Fig. 6.1 - *Hands-on Science Maps for Kids*

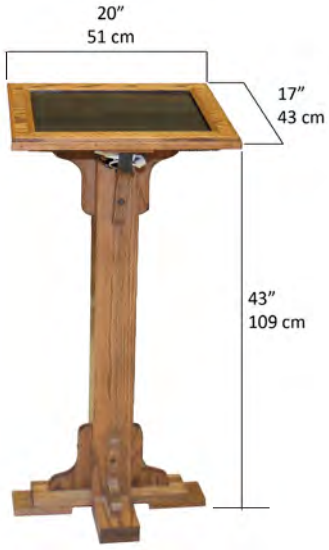


Fig. 6.2 - *Illuminated Diagram* Lectern

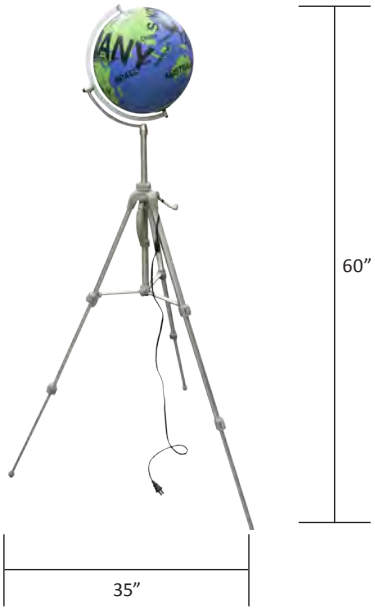


Fig. 6.3 - *WorldProcessor* Globe

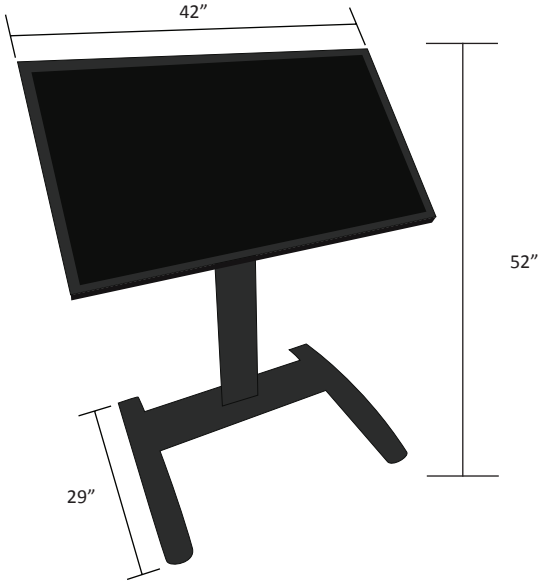


Fig. 6.4 - Macroscope Kiosk

Macroscope Kiosk Setup

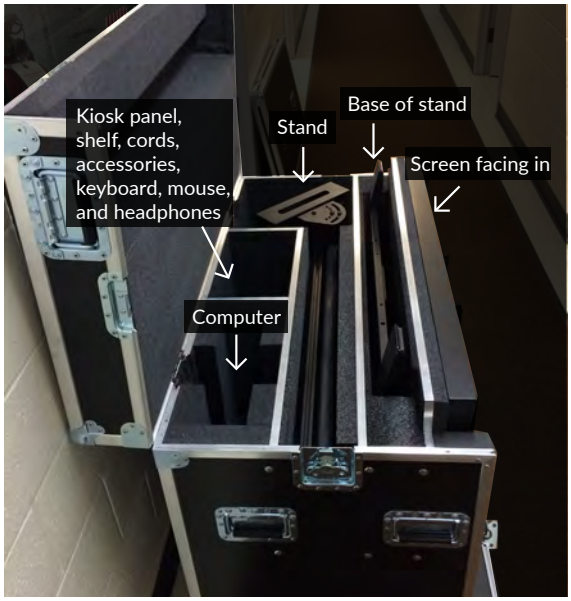


Fig. 7.1 - Road case

Included Equipment:

- 46" Elo touchscreen
- Kiosk stand (including shelf & base)
- Alienware PC
- Keyboard
- Mouse
- Headphones
- Touchscreen power cord (connected)
- USB touchscreen cord (connected)
- HDMI cord (connected)
- Kensington combination lock
- Black velcro straps
- Bag w/4 screws for base, 2 screws for monitor, 2 hex keys for base and monitor assembly.
- Audio cord
- DVI cord
- Touchscreen power cords [Type C &G]
- OSD Remote

1.0 Assembling the kiosk

The stand that supports the touchscreen travels in three separate pieces. First you will want to attach the base to the upright. Then you can attach the shelf to the upright.

Attaching the base to the upright

The base has 4 screws that attach the base to the upright (see Figure 7.2). You will need to turn the base at a 45-degree angle from the floor in order to access the screws (see Figure 7.3). A second person is needed to hold the upright into position as the screws are installed using the 7/32" hex key. Screw these into place. Turn the base upright again.

Attaching the shelf

An accessory shelf attaches to the front of the kiosk stand in order to hold the PC that powers the touchscreen. This shelf must be removed for travel, but the knobs that support the shelf remain in place during shipping. The locations of the knobs and the shelf itself are marked in silver on the upright. Unscrew and remove the knobs (carefully, without dislodging the shelf nuts inside the upright), insert the shelf, and reinsert the knobs and tighten. Loosen knobs and slide up or down to reposition the shelf.

Fig. 7.2 - Attaching the base to the upright

Fig. 7.3 - Accessing the screws

Installing the screen

This step is best done with three people. Remove the drop front of the case to reveal the screen, with its back facing out. Carefully remove the screen from the case. You shouldn't need to lift the screen more than a few inches. Now, have two people lift the screen into position on the monitor stand. The two top screws on the mounting hardware on the back of the screen will slide into the keyhole opening at the top of the upright and slide down into place. Two more screws can be found in the plastic bags with the hex keys. The third person inserts the two lower screws into position, connecting the screen to the stand. Once you have established that the screws are positioned correctly, use the security hex key (the one with a hole in the center) to tighten the two lower bolts. Then, tighten the upper two bolts.

Macroscope Kiosk Setup (cont.)

Connecting the computer

The computer that runs the touchscreen sits on the shelf below the screen. Set the computer in place. Secure the computer to the stand using the Kensington combination lock. The combination is 1104.

- The next step is to connect the computer, screen, and power supply.
- Connect the screen and computer using the HDMI cable.
- Connect the screen and computer using the USB Touch cable, making sure to connect to the USB port closer to the side of the computer without the illuminated blue light.
- Tuck these cords into the accessory box as much as possible to reduce the visual clutter of hanging cords.
- Secure the computer to the stand with the velcro strap.
- Facing the touch screen, there are two buttons on the backside of the lower right hand corner. The top is the menu button, the bottom is the power button. Press the power button for 3 seconds to turn on the screen..

A DVI cord and a 1/8" to 1/8" audio cord can be used in place of the HDMI cord. They have been provided in a separate bag to serve as a backup method of connection. You probably will not need them.

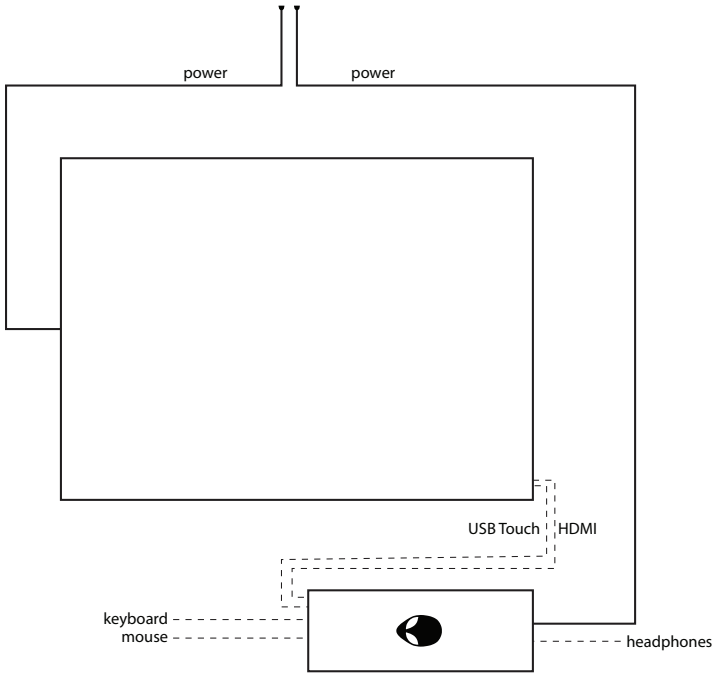


Fig. 8.1 - Wireframe of the hardware configuration

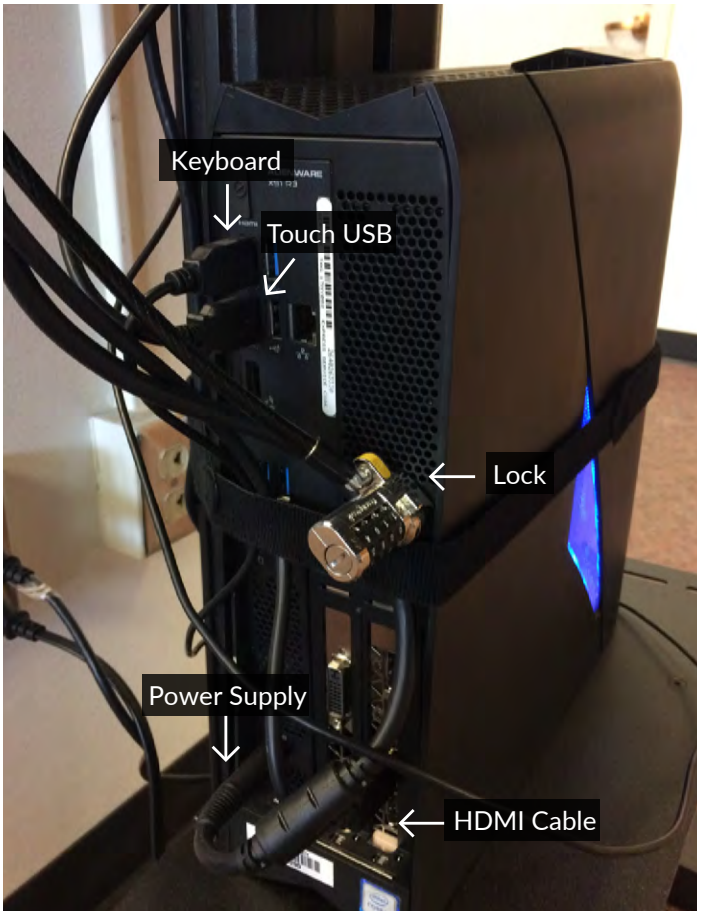


Fig. 8.2 - Back of computer configuration.

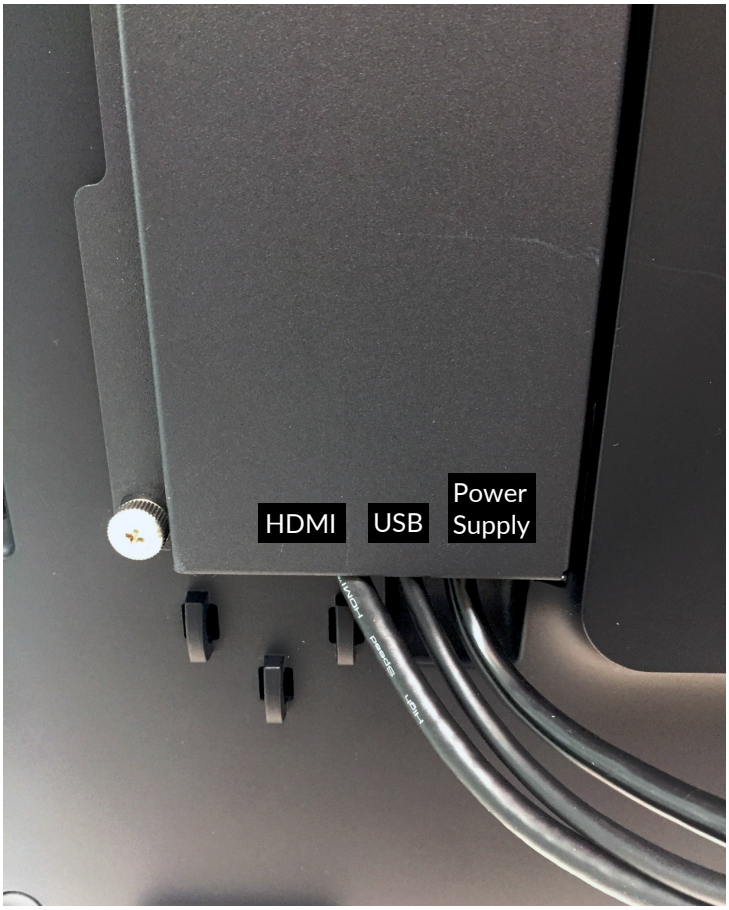


Fig. 8.3 - Back view of the touchscreen.

Macroscope Kiosk Setup (cont.)

2.0 Launching the software

Launch the macroscopes

- Before starting , make sure that the touchscreen is connected and turned on.
- Press the computer's power button [large button at the top of the peak on the right hand side] until illuminated [**Fig 9.1**]. The macroscope program will start up in 2-4 minutes. You will see the Ubuntu loading screen, the desktop with the P&S logo, then the macroscopes will launch [**Fig 9.2**].
- If it is the first time deploying the kiosk at your venue and individual macroscopes aren't loading, you may need to first connect to WiFi. See **Sections 2.1-2.3** below.
- Please remove the keyboard before visitors have access to the kiosk.

Fig 9.1
Power Button

Fig 9.2
Starting sequence

2.1 Switching from Macroscope Mode to Desktop Mode

Taking the kiosk to a Configurable State

- Facing the kiosk, the backside of the computer should be on your left with the blue screen facing towards you. Plug the keyboard into any of the USB ports farther away from you (above the green headphone jack). [**Fig 10.1**]
- Wait **30 seconds**, then press down CTRL + ALT + F2 [**Fig 10.2**] This takes you to the terminal [**Fig 10.3**].
- Once on the terminal, type `cns` for the login and press enter, then type in the password (see the login information to the right, just below Fig 10.3) and hit enter. While it won't appear that your typing is working, the computer is registering it. If you mistype the password, you will need to renter both the username and password.
- Now that you are logged in as cns, you will be taken to another terminal screen [**Fig 10.4**] which lists command options. Type `enable-login` and press enter, then the password (see login info to right) and press enter. A screen with white, green and red text might pop up; if it does, ignore it and press enter.
- After a few seconds you will be taken to screen that looks like a typical login screen [**Fig 10.5**] . Select '**cns**' as the user, and enter the password (see login info on the right). You are now on the desktop [**Fig 10.6**] (Ubuntu 18.4)

Fig 10.1

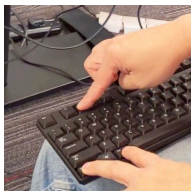


Fig 10.2

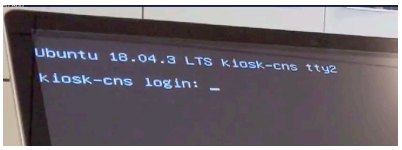


Fig 10.3

Login Information

Username/Login: `cns`
Password: `Just a dumb ki0sk`
(the '0' is a zero)

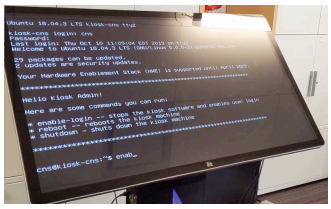


Fig 10.4

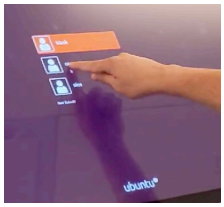


Fig 10.5

Fig 10.6

2.2 Setting Up WiFi

- Once you are in the desktop mode (see **Section 2.1** above), enable or change the WiFi by clicking the WiFi symbol in the upper right hand corner of the screen and then 'Select Network' The networks available to you will pop up [**Fig 11.1**]. Select your network and hit 'connect.' Depending on your selected network type one of the following will happen:

  Open [Preferred] An interstitial screen with terms and conditions may appear, or you will be connected automatically.

  Secured Network configuration options will pop up [**Fig 11.2**] Accept the defaults given (unless your network has different requirements). If you run into issues, please consult the Ubuntu WiFi Documentation (https://bit.ly/2Xcf7cK).

- Once your WiFi is set up, restart the computer [**Section 2.3** below] to return to the macroscope mode.

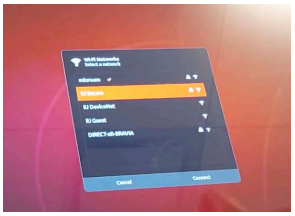


Fig 11.1

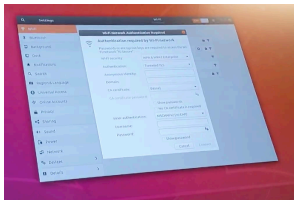


Fig 11.2

2.3 Restarting / Shutting Down the Kiosk

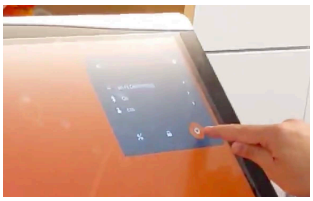


Fig 12.1

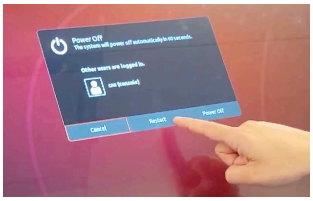


Fig 12.2

Preferred Methods

- **Desktop mode**: [see **Section 2.1**] click the power icon in the upper right hand corner and then the power icon again [**Fig 12.1**] . After the power options appear, select 'Restart' or 'Power Off' [**Fig 12.2**].
- **Macroscope Mode**: Enter CTRL + ALT + F2 to enter the terminal, then CTRL + ALT + DELETE to restart

Alternative Methods

- The next best option is to do a gentleish restart: press the power button [**Fig 9.1**] briefly. This will cause the computer to shutdown safely. Press the power button to turn back on.
- If neither of the above options work, do a hard restart. Press the power button for 10 seconds until the computer powers off completely, then to turn on press the power again. The computer will automatically boot into macroscope mode.

3.0 Cleaning and maintenance

Keep the following points in mind when deaning the surface of the touchscreen display:

- When the surface becomes dirty, wipe it lightly with a dean microfiber cloth
- If the surface requires additional cleaning, use LCD screen cleaner or LCD wipes. If you use a spray cleaner, spray the cleaner onto a microfiber cloth rather than directly onto the screen.
- Do not let cleaner seep into the display, as it may cause electrical shock or damage.

If practical, turn the screen off when the museum is closed. This will prevent temporary ghost images.

FAQs

I am planning the exhibit layout. Where is the best place to locate the kiosk?

You will need to run a cord to a grounded electrical outlet. If you have an ethernet connection to the internet, you will need to be within reach of that outlet as well. Because the screen uses infrared technology to register touch, placing the kiosk in direct sunlight might cause difficulties with interpreting touch input correctly.

Touch isn't working. What can I do?

Check whether the USB Touch cord is connected to both the screen and the computer [USB port farther from side of computer with blue light]. If you are not able to make anything happen by touching the screen, you will need to restart the computer. Follow the '**Alternative Methods**' restart instructions from **Section2.3.**

How can I adjust the sound volume?

Follow the instructions from **Section 2.1** get to the desktop. Touch the **sound** icon in the upper-right corner of the screen and slide the bar to adjust the sound up or down. If you would prefer headphones, you can plug the included headphones into the **audicout** jack on the monitor or into the **headphones** jack on the PC.

I got a screen that says 'A start job is running for Hold un...' when I tried to get to the terminal. What do I do?

This happens if you try to enter the terminal too quickly after turning on the computer. To get back to the macroscope mode, press down CTRL + ALT + F1. After you've waited 30 seconds, try to enter the terminal again by pressing CTRL + ALT + F2.

I'm stuck. Is there someone I can contact for technical issues?

Yes. If restarting hasn't fixed the issue or you are having difficulties getting the kiosk setup, please contact Esmé Middaugh, **middaugh@iu.edu**.

How do I pack the road case for travel?

See **Fig 7.1** for how to pack the case.

Illuminated Diagram Equipment Checklist

Below is a listing of the equipment that will come with the *Illuminated Diagram* display. Please make sure all items listed arrive at your venue. Notify us as soon as possible if the *ID* arrives without any of the listed pieces so we can work with you on having them replaced. Use this sheet when packing the exhibit to help make sure that all the pieces are included for the next venue. Thank you!

Included Equipment:

- 3 Mac Mini computers
- 3 Ethernet cables
- 1 VGA extension cable
- 2 DVI cables
- 1 USB keyboard
- 1 USB mouse
- 3 USB extension cables
- 1 podium & touch screen monitor
- 2 high-resolution transparent maps (Geomap and Scimap)
- 1 network switch

3 × Mac Mini computers

3 × ethernet cables

1 × VGA Extension cable

2 × DVI cables

1 × USB keyboard

1 × USB mouse

3 × USB extension cables

1 × network switch

- 1 × Geomap overlay (left map)
- 1 × Scimap overlay (right map)
- 1 × podium (not pictured) with attached touch-screen monitor (below)

Illuminated Diagram Setup

1.0 Hardware setup

The *Illuminated Diagram* (*ID*) application is most often implemented using two large, high-definition displays (HDD) and a smaller touchscreen display (TSD), each driven by 3 separate Mac Mini computers. The HDDs are provided by the venue while the other parts are provided upon acquisition. The HDDs are mounted side by side in landscape orientation. The TSD is mounted on a podium a short distance in front of the larger displays. The three computers are connected through the network switch as a local network and assigned static IP addresses.

Hooking up the Mac Mini computers to your monitors

- **Geo Frame and Topic Frame computers** - Connect the power cable, LAN cable, and DVI cable to the computers as shown in **Figure 13.2**. Note that both computers for the Topic and Geographic Frames will have the same connections and that both DVI cables will connect the computers to separate monitors.
- **Touchscreen computer -** Connect the LAN cable, and the SVIDEO cable from the touchscreen display to the SVIDEO-DVI connector and attach the DVI-end to the computer as shown in **Figures 13.3** and **13.4**. Note that there is a USB cable used to connect this computer to the touchscreen monitor.
- **Network switch** - Connect the LAN cables from both the Geographic and Topic Frame computers to the network switch shown in **Figure 13.5**.

Turning everything on

- Turn on computers & TSD. The switch for the touchscreen is located on the left of the screen, behind the bracket that secures it to the podium.
- The power buttons on the Mac Minis are located right above where the power cord plugs into them. Push it until you feel the Mac Mini either click or you hear the hard drive start turning.

Use the following login info for loggin into the Mac Minis:
Username: Administrator / **Password:** scimap

Applying the overlays

- The overlays for the Geographic and Topic maps are made out of a material called "cling film." This material is safe for your monitors and is reappliable if it needs to be repositioned.
- Peel a small corner back from one of the overlays so you can see what side needs to go on the monitor and which side you can discard. This will also give you an idea on how you may want to handle the material.
- Peel the backing off of the cling film on a flat and dust-free (as much as possible) surface, and then apply the overlay to your monitor, trying not to have any air bubbles trapped beneath

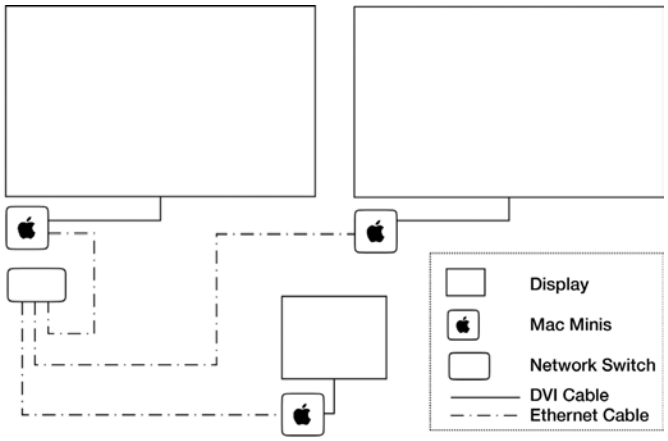


Fig. 13.1 - Wireframe of the hardware configuration

Fig. 13.2 - Geo and Topic Frame Mac Minis

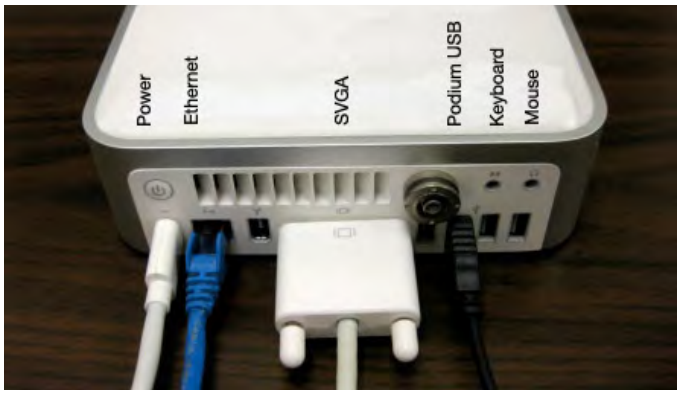


Fig. 13.3 - Touchscreen Mac Mini

Fig. 13.4 - LAN cables can go into any open port.

Fig. 13.5 - SVIDEO-DVI connector

Illuminated Diagram Setup

2.0 Launching *Illuminated Diagram* software

Initial Setup: The following steps must be taken before running the *ID* application:

Edit the configuration file so that the screen resolution is matched with the HDD display resolution. Avoid editing other properties unless you understand what you are doing. Each software component will look for a configuration file named "ConfigSciMap2.0.xml" in the current working directory. The directory shortcut can be found at each Mac Mini's desktop.

Set up the Geographic and Topic Map Overlays

Launch TF and GF in close succession or else they may fail to load correctly!
The software must be launched in the listed order!

1. **DataServer (DS)** – Deploy DS from Topic Frame Mac by double-clicking the DataServer.exe file on the same computer that runs TF.
2. **TFrame (TF)** – This controls the display of the topic map. Deploy TF from Topic Frame Mac by double-clicking the TFrame.exe.
3. **GFrame (GF)** – This controls the geographic map. Deploy GF from Geo Frame computer by double-clicking the GFrameLow.exe. Please wait 5-10 minutes until both TF and GF show up on their HDD screens.
4. **HDD Display Configuration** – Use the following keyboard shortcuts to adjust the GF and TF nodes until it matches the transparent map on the HDD display. Once you have the nodes lined up, press the '**c**' key to save your display settings in a file named ConfigSciMap2.0_bkup.xml. To make changes permanent, copy the contents of this file to ConfigSciMap2.0.xml and then shut the system down using the steps below the table.

TIP

TightVNC is an application that allows you to use one mouse & one keyboard through the GUI interface. Connect the keyboard and mouse to the Touchscreen Computer. Double-click on the **TightVNC** desktop icon on the Touchscreen desktop. Enter the Tframe IP: 149.166.144.254 and then press **Connect**. Use "scimap" as the password. Repeat the same step for the GFrame IP: 149.166.144.254. Once the GF and TF applications have loaded, you can close their TightVNC remote windows.

Type	Keystroke	Result	Type	Keystroke	Result
GUI	f	Borderless window	**TF/GF**	CTRL + a	Translates map to left
GUI	r	Restores borders	**TF/GF**	CTRL + s	Translates map to right
TF/GF	CTRL + p	Scales up point size	**TF/GF**	CTRL + w	Translates map up
TF/GF	CTRL + n	Scales down point size	**TF/GF**	CTRL + x	Translates map down
TF/GF	Shift + a	Shrinks map along X axis	**TF/GF**	Shift + w	Enlarges map along Y axis
TF/GF	Shift + s	Scales map up along X axis	**TF/GF**	Shift + x	Scales map up along Y axis

Shutting down

1. Exit the GFrame by pressing **Escape**.
2. Exit the TFrame by pressing **Escape**.
3. Exit the DataServer by pressing **Enter** or **Return**.

Launching the software

Launch TF and GF in close succession or else they may fail to load correctly! *The software must be launched in the listed order!*

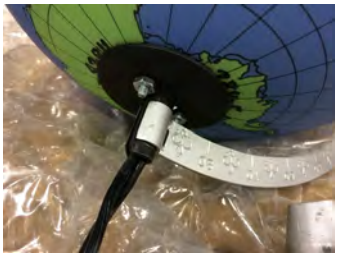
1. **DataServer (DS)** – Deploy DS from Topic Frame Mac by double-clicking the DataServer.exe file on the same computer that runs TF.
2. **TFrame (TF)** – Deploy TF from Topic Frame Mac by double-clicking the TFrame.exe.
3. **GFrame (GF)** – Deploy GF from Geo Frame computer by double-clicking the GFrame.exe. Please wait 5-10 minutes until both TF and GF show up on their HDD screens.
4. **Graphical User Interface (GUI)** – Deploy the GUI from the touchscreen computer by double-clicking the ScimapGUI.exe. Please wait 5-10 minutes until the GUI displays on the touchscreen panel. The graphical user interface runs on the touch-screen display. It allows the user to interact with the ID application. The DataServer, TFrame, and GFrame components must be running before the GUI component is launched.

If a component fails to launch or is closed accidentally, you may need to restart, beginning with the DataServer. The exception to this note is the GUI – it may be run and closed multiple times without restarting the other components.

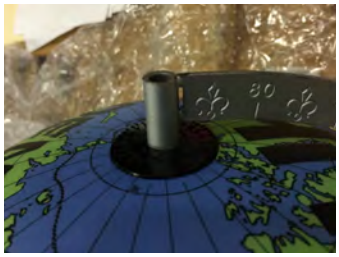
WorldProcessor Globes Assembly

The globes are fragile. Cotton gloves are enclosed for use when handling these delicate sculptures. When unpacking the globe, please set it on a clean, padded surface (such as the bubble wrap it was packed in). *Note: the bulb assembly is designed to sit loosely inside the globe. Do not try to tighten it.*


1. Fully extend the tripod legs and and lock into position. Use the handle to extend the neck and lock it into place with the round collar.

2. Remove the black plastic pin at the top of the globe and set aside. Fit the black power cord at the base of the globe into the lower end of the silver globe bracket.

3. Carefully fit the top of the silver globe bracket into place at the top of the globe with the black disk between the globe and the silver bracket. Exercise caution to prevent scratching the surface of the globe.


4. Insert the black plastic pin through the globe bracket and into the globe. The bracket can now be attached to the tripod stand.


5. Screw the bracket onto the neck of the tripod, keeping the power cord away from the neck to prevent it from getting tangled. Plug the power cord into an outlet to illuminate the globe.


6. Fill the water bottle and attach the clip on the top of the bottle to the screw hook on the base of the tripod. This stabilizes the base, making it less likely that a visitor will knock the globe over accidentally.

List of Insurable Items

Total Cost of Insurable Items: $57,756

Insurable components of the 100 maps: **$29,436**

Item	Cost Per Item	Number of Items	Total Cost
Maps	$250	100	$25,000
Introduction Panel	$300	1	$300
Compare & Contrast Panel	$150	10	$1500
Map Label	$25	104	$2,600
Exhibit Video (DVD)	$18	1	$18
Humanexus (DVD)	$18	1	$18

Insurable components of *WorldProcessor* Globes by contributing artist Ingo Günther: **$15,075**

Item	Cost Per Item	Number of Items	Total Cost
WorldProcessor Globe	$5,000	3	$15,000
Globe Label	$25	3	$75

Insurable components of *Illuminated Diagram* displays by contributing artist W. Bradford Paley: **$4,820**

Item	Cost Per Item	Number of Items	Total Cost
ID Map on Cling Paper	$135	2	$270
ID Map Label	$150	1	$150
Mac Mini	$800	3	$2,400
Customized lectern with touchscreen; Embedded Viewsonic VP201b monitor, s/n: A21034301217; Embedded MicroTouch touchscreen, s/n: 587449	Replacement value approx. $1,500	1	$1,500
Miscellaneous cables	Replacement value approx. $500		$500

Insurable components of the *Hands-on Science Maps for Kids*: **$4,025**

Item	Cost Per Item	Number of Items	Total Cost
Map	$2,000	2	$4,000
Map Label	$25	1	$25

Insurable components of the Macroscope Kiosk: **$4,400**

Item	Cost Per Item	Number of Items	Total Cost
Elo 46” touchscreen + stand with shelf	$3,000	1	$3,000
Alienware R3 PC	Replacement value approx. $1100	1	$1100
Cords, media shelf, headphones, lock	Replacement value approx. $150		$150
Compare & Contrast Panel	$150	1	$150

Condition Report and Crate Inventory

Please report the condition of exhibit materials as they arrive at your venue and again as you pack them for travel to their next destination. Thank you for helping us keep the exhibit in excellent condition!

Report completed by: _____ Date: _____

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 1 of 12		1st Iteration: The Power of Maps (2005)				
120328: Double crate	I.1	Cosmographia *World Map*, by Claudius Ptolemy				
Requires a Phillips Screwdriver to open	I.2	*Nova Anglia, Novvm Belgivm et Virginia*, by Johannes Janssonius				
No map labels this crate; Map labels in Add'l Elements crate	I.3	*A New Map of the Whole World with the Trade Winds According to the Latest and Most Exact Observations*, by Herman Moll				
	I.4	*Napoleon's March to Moscow*, by Charles Joseph Minard				
	I.5	*1996 Map of Science: A Network Representation of the 43 Fourth-Level Clusters Based on Data from the 1996* Science Citation Index, by Henry G. Small				
	I.6	*Ph.D. Thesis Map*, by Keith V. Nesbitt				
	I.7	*Timeline of 60 Years of Anthrax Research Literature*, by Steven A. Morris				
	I.8	*Treemap View of 2004 Usenet Returnees*, by Marc Smith and Danyel Fisher				
	I.9	*In Terms of Geography*, by André Skupin				
	I.10	*The Structure of Science*, by Kevin W. Boyack and Richard Klavans				
		1st Iteration Compare and Contrast Panel 14" x 20"				
		Number of hanging cleats? 0				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
		2nd Iteration: The Power of Reference Systems (2006)				
	II.1	*U.S. Frequency Allocations Chart*, by the National Telecommunications and Information Administration				
	II.2	*Visual Periodic Table of the Elements*, by Murray Robertson and John Emsley				
	II.3	*Cartographica Extraordinaire: The Historical Map Transformed*, by David Rumsey and Edith M. Punt				
	II.4	*Sky Chart of New York City in April 2006*, by Roger W. Sinnott and The Interactive Factory				
	II.5	*HistCite™ Visualization of DNA Development*, by Eugene Garfield, Elisha F. Hardy, Katy Börner, Ludmila Pollock, and Jan Witkowski				
	II.6	*History Flow Visualization of the Wikipedia Entry on "Abortion,"* by Martin Wattenberg and Fernanda B. Viégas				
	II.7	*TextArc Visualization of The History of Science*, by W. Bradford Paley				
	II.8	*Taxonomy Visualization of Patent Data*, by Katy Börner, Elisha F. Hardy, Bruce W. Herr II, Todd M. Holloway, and W. Bradford Paley				
	II.9	*Map of Scientific Paradigms*, by Kevin W. Boyack and Richard Klavans				
	II.10	*WorldProcessor: Zones of Invention–Patterns of Patents*, by Ingo Günther				
		2nd Iteration Compare and Contrast Panel 14" x 20"				
		Number of hanging deats? 0				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 2 of 12		3rd Iteration: The Power of Forecasts (2007)				
120326: wheeled crate	III.1	*Tectonic Movements and Earthquake Hazard Predictions*, by Michael W. Hamburger, Chuck Meertens, and Elisha F. Hardy				
Requires a Phillips Screwdriver to open	III.2	*The Oil Age: World Oil Production 1859 to 2050*, by Rob Bracken, Dave Menninger, Michael Poremba, and Richard Katz				
No map labels this crate; Map labels in Add'l Elements crate	III.3	*Impact of Air Travel on Global Spread of Infectious Diseases*, by Vittoria Colizza, Alessandro Vespignani, and Elisha F. Hardy				
	III.4	*[./logicaland] Participative Global Simulation*, by Michael Aschauer, Maia Gusberti, Nik Thoenen, and Sepp Deinhofer				
	III.5	*Science & Technology Outlook: 2005-2055*, by Marina Gorbis, Jean Hagan, Alex Soojung-Kim Pang, and David Pescovitz				
	III.6	*113 Years of* Physical Review, by Bruce W. Herr II, Russell J. Duhon, Elisha F. Hardy, Shashikant Penumarthy, and Katy Börner				
	III.7	*Mapping the Universe: Space, Time, and Discovery!*, by Chaomei Chen, Jian Zhang, Lisa Kershner, Michael S. Vogeley, J. Richard Gott III, and Mario Juric				
	III.8	*Science-Related Wikipedian Activity*, by Bruce W. Herr II, Todd M. Holloway, Elisha F. Hardy, Kevin W. Boyack, and Katy Börner				
	III.9	*Maps of Science: Forecasting Large Trends in Science*, by Richard Klavans and Kevin W. Boyack				
	III.10	*Hypothetical Model of the Evolution and Structure of Science*, by Daniel Zeller				
		3rd Iteration Compare and Contrast Panel 14" x 20"				
		Label for *Illuminated Diagram* 14" x 20"				
		Introductory Panel 29" x 52" (two pieces)				
		Number of hanging cleats? 0				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 3 of 12		4th Iteration: Science Maps for Economic Decision Makers (2008)				
120322: black corner	IV.1	*Europe Raw Cotton Imports in 1858, 1864 and 1865*, by Charles Joseph Minard				
	IV.2	*Shrinking of Our Planet*, by R. Buckminster Fuller and John McHale				
	IV.3	*Tracing of Key Events in the Development of the Video Tape Recorder*, by George Benn and Francis Narin				
	IV.4	*World Finance Corporation, Miami, Florida, ca. 1970-79 (6th Version)*, by Mark Lombardi				
	IV.5	*Examining the Evolution and Distribution of Patent Classifications*, by Daniel O. Kutz, Katy Börner, and Elisha F. Hardy				
	IV.6	*Ecological Footprint*, by Danny Dorling, Mark E. J. Newman, Graham Allsopp, Anna Barford, Ben Wheeler, John Pritchard, and David Dorling				
	IV.7	*The Product Space*, by César A. Hidalgo, Bailey Klinger, Albert-László Barabási, and Ricardo Hausmann				
	IV.8	*4D™. The Structured Visual Approach to Business-Issue Resolution*, by John Caswell, Hazel Tiffany, and Ian Francis				
	IV.9	*The Scientific Roots of Technology*, by Kevin W. Boyack and Richard Klavans				
	IV.10	*A Global Projection of Subjective Well-Being*, by Adrian White & the National Geographic *EarthPulse* Team				
		10 4th Iteration Map Labels				
		4th Iteration Compare and Contrast Panel 14" x 20"				
		Number of hanging deats? 10				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 4 of 12		5th Iteration: Science Maps for Policy Makers (2009)				
120323: red corner	V.1	*Science and Society in Equilibrium*, by Joseph P. Martino				
	V.2	*Networks of Scientific Communications*, by Georgiy G. Dumenton				
	V.3	*Realigning the Boston Traffic Separation Scheme to Reduce the Risk of Ship Strike to Right and Other Baleen Whales*, by David N. Wiley, Michael A. Thompson, and Richard Merrick				
	V.4	*Mobile Landscapes: Using Location Data from Cell Phones for Urban Analysis*, by Sarah Williams, Carlo Ratti, and Riccardo Maria Pulselli				
	V.5	*Death and Taxes 2009*, by Jess Bachman				
	V.6	*Chemical R&D Powers the U.S. Innovation Engine*, by the Council for Chemical Research				
	V.7	*A Topic Map of NIH Grants 2007*, by Bruce W. Herr II, Gully A.P.C. Burns, David Newman, and Edmund Talley				
	V.8	*A Clickstream Map of Science*, by Johan Bollen, Herbert Van de Sompel, Aric Hagberg, Luís M. A. Bettencourt, Ryan Chute, Marko A. Rodriguez, and Lyudmila Balakireva				
	V.9	*U.S. Vulnerabilities in Science*, by Kevin W. Boyack and Richard Klavans				
	V.10	*The Millennium Development Goals Map*, by the World Bank and National Geographic				
		10 5th Iteration Map Labels				
		5th Iteration Compare and Contrast Panel 14” x 20”				
		Number of hanging cleats? 10				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 5 of 12		6th Iteration: Science Maps for Scholars (2010)				
120325: green corner	VI.1	*Tree of Life*, by Peer Bork, Francesca Ciccarelli, Chris Creevey, Berend Snel, and Christian von Mering				
	VI.2	*The Human Connectome*, by Patric Hagmann and Olaf Sporns				
	VI.3	*Diseasome: The Human Disease Network*, by Mathieu Bastian and Sébastien Heymann				
	VI.4	*Human Speechome Project*, by George Shaw, Philip James DeCamp, and Deb Roy				
	VI.5	*Mapping the Archive: Prix Ars Electronica*, by Dietmar Offenhuber, Moritz Stefaner, Evelyn Münster, Jaume Nualart, and Gerhard Dirmoser				
	VI.6	*Knowledge Cartography*, by Marco Quaggiotto				
	VI.7	*Literary Empires: Mapping Temporal and Spatial Settings of Victorian Poetry*, by John A. Walsh, Devin Becker, Bradford Demarest, Jonathan Tweedy, Theodora Michaelidou, and Laura Pence				
	VI.8	*The Emergence of Nanoscience & Technology*, by Loet Leydesdorff				
	VI.9	*Weaving the Fabric of Science*, by Richard Klavans and Kevin W. Boyack, SciTech Strategies, Inc.				
	VI.10	*U.S. Job Market: Where are the Academic Jobs?*, by Angela M. Zoss and Katy Börner				
		10 6th Iteration Map Labels				
		6th Iteration Compare and Contrast Panel 14” x 20”				
		3 mac minis				
		3 power cords (white)				
		3 mac mini power supply blocks				
		Number of hanging deats? 10				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 6 of 12		7th Iteration:Science Maps as Visual Interfaces to Digital Libraries (2011)				
120327: yellow corner	VII.1	*Mondothèque. Multimedia Desk in a Global Internet*, by Paul Otlet				
	VII.2	*A Chart Illustrating Some of the Relations between the Branches of Natural Science and Technology*, by H.J.T. Ellingham				
	VII.3	*Visualizing Bible Cross-References*, by Chris Harrison and Christoph Römhild				
	VII.4	*Finding Research Literature on Autism*, by Rex Robison				
	VII.5	*Design vs. Emergence: Visualization of Knowledge Orders*, by Alkim Almila Akdag Salah, Cheng Gao, Krzysztof Suchecki, and Andrea Scharnhorst				
	VII.6	*Map of Scientific Collaborations from 2005-2009*, by Olivier H. Beauchesne				
	VII.7	*The Census of Antique Works of Art and Architecture Known in the Renaissance, 1947-2005*, by Maximilian Schich				
	VII.8	*Seeing Standards: A Visualization of the Metadata Universe*, by Devin Becker and Jenn Riley				
	VII.9	*MACE Classification Taxonomy*, by Moritz Stefaner				
	VII.10	*History of Science Fiction*, by Ward Shelley				
		10 7th Iteration Map Labels				
		7th Iteration Compare and Contrast Panel 14" x 20"				
		Number of hanging deats? 10				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 7 of 12		8th Iteration: Science Maps for Kids (2012)				
122829: green corner	VIII.1	*Geologic Time Spiral: A Path to the Past*, by Joseph Graham, William Newman, and John Stacy				
	VIII.2	*Movie Narrative Charts (Comic #657)*, by Randall Munroe				
	VIII.3	*Metropolitan Museum of Art Family Map*, by Masha Turchinsky and John Kerschbaum				
	VIII.4	*Left vs. Right Political Spectrum*, by David McCandless and Stefanie Posavec				
	VIII.5	*Gapminder World Map*, by Ola Rosling and Anna Rosling-Rönnlund				
	VIII.6	*Knowledge Web*, by James Burke, Patrick McKercher, and Michael J. Stamper				
	VIII.7	*Manga Universe*, by Lev Manovich, Jeremy Douglass, and Jay Chow				
	VIII.8	*The Fundamental Interconnectedness of All Things*, by Matthew Richardson, Judith Kamalski, Sarah Huggett, and Andrew Plume				
	VIII.9	*Language Communities of Twitter*, by Eric Fischer				
	VIII.10	*Khan Academy Library Overview*, by Benjamin Wiederkehr and Jérôme Cukier				
		10 8th Iteration Map Labels				
		8th Iteration Compare and Contrast Panel 14" x 20"				
		Number of hanging deats? 10				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 8 of 12		9th Iteration: Science Maps Showing Trends and Dynamics (2013)				
120545: red corner	IX.1	*NASA Views Our Perpetually Moving Ocean*, by Dimitris Menemenlis, Horace G. Mitchell, Christopher N. Hill, and Gregory W. Shirah				
	IX.2	*Hurricanes & Tropical Storms—Locations and Intensities since 1851*, by John Nelson				
	IX.3	*State of the Polar Bear*, by Dino Citraro, Kim Rees, Jacob O'Brien, Brett Johnson, Domanique Alicia, and Andrew Winterman				
	IX.4	*Pulse of the Nation*, by Alan Mislove, Sune Lehmann, Yong-Yeol Ahn, Jukka-Pekka Onnela, and James Niels Rosenquist				
	IX.5	*Map of Complexity Science*, by Brian Castellani				
	IX.6	*Visualizing Trends and Dynamics: 30 Years of Scientific Development*, by Nees Jan van Eck, Ludo Waltman, and Ferdy van Gool				
	IX.7	*The Hewlett Foundation Grant Visualizer*, by Dino Citraro, Kim Rees, Jacob O'Brien, Brett Johnson, Andrew Winterman, and Andrew Witherspoon				
	IX.8	*Who Really Matters in the World—Leadership Networks in Different-Language Wikipedias*, by Peter A. Gloor, Keiichi Nemoto, Samuel T. Mills, and David E. Polley				
	IX.9	*Identifying Emerging Topics in Science and Technology*, Kevin W. Boyack, Richard Klavans, and Henry G. Small				
	IX.10	*Science Phylomemy*, by David Chavalarias and Jean-Philippe Cointet				
		10 9th Iteration Map Labels				
		9th Iteration Compare and Contrast Panel 14" x 20"				
		Number of hanging cleats? 10				

Condition Report and Crate Inventory

Crate #/Info	#	Map Title / Item Description	Crushed Corners	Edges Peeling	Other	Description of Damages
Crate 9 of 12		10th Iteration: Frontiers of Science Mapping (2014)				
123607: black corner	X.1	*Being a Map of Physics*, by Bernard H. Porter				
	X.2	*Map of the Internet* , by Martin Vargic				
	X.3	*PREDICT HealthMap*, by John Brownstein, Damien Joly, William Karesh, Peter Daszak, Nathan Wolfe, Tracey Goldstein, Susan Aman, Clark Freifeld, Sumiko Mekaru, Tammie O'Rourke, Stephen Morse, Christine Kreuder Johnson, Jonna Mazet and the PREDICT Consortium				
	X.4	*ORBIS*, by Elijah Meeks and Walter Scheidel				
	X.5	*Money*, by Randall Monroe				
	X.6	*The Linguistic Context of Citations*, by Marc Bertin, Iana Atanassova, Vincent Lariviere, and Yves Gingras				
	X.7	*Visual Funding Portfolios*, by Mortiz Stefaner, Mario Diwersy, and Christian Herzog				
	X.8	*Mapping Graphene Science and Development*, by Luciano Kay, Alan L. Porter, Ismael Rafols, Nils Newman, and Jan L. Youtie				
	X.9	*Exploring the Relationships between a Map of Altruism and a Map of Science*, by Richard Klavans and Kevin W. Boyack				
	X.10	*Interstitial Organizations as Bridges*, by Walter W. Powell, Achim Oberg, and Valeska P. Korff				
		10 10th Iteration Map Labels				
		10th Iteration Compare and Contrast Panel 14" x 20"				
		Number of hanging deats? 10				

Condition Report and Crate Inventory

Crate #/Info	Map Title / Item Description	Notes	Damaged?	Description of Damages
Crate 10 of 12	Additional Elements			
120324	Lectern			
Requires a Phillips Screwdriver to open	Ethernet cords (gray) - 3	These items are in a cardboard box.		
	Video cables (green) - 3			
	SVGA to DV1 cord			
	Gigabit ethernet switch			
	USB cords (gray) - 2 (labeled for mouse)			
	Logitech keyboard K120			
	Logitech mouse			
	Illuminated Diagram instructions and equipment checklist			
	Plexi clue sheets (for use with *Hands-on Science Maps for Kids*) - 2			
	Geographic map overlay (1 copy)			
	Map of science overlay (1 copy)			
	Guest book	These items are in a fleece pouch.		
	Display copy of *Atlas of Science*			
	Display copy of *Atlas of Knowledge*			
	Display copy of *Visual Insights*			
	Hands-on Science Map for Kids			
	Hands-on World Map for Kids			
	Exhibit DVD			
	Humanexus DVD			
	Map labels for iterations 1-3 and all additional elements			
	Number of hanging cleats? 53			

Condition Report and Crate Inventory

Crate #/Info	Map Title / Item Description	Notes	Damaged?	Description of Damages
Crate 11 of 12	*WorldProcessor* Globes			
120329: green footlocker	*Foreign US Patent Holders (WorldProcessor #294-5*, blue), with tripod stand			
	Patterns of Patents & Zones of Invention (WorldProcessor #286-4, white), with tripod stand			
	Shape of Science - Science Universe (WorldProcessor #348-6, black), with tripod stand			
	3 silver-colored globe brackets			
	3 each - water bottles, dips, and screw hook attachments			
	2 pr - white cotton gloves			

Crate #/Info	Map Title / Item Description	Notes	Damaged?	Description of Damages
Crate 12 of 12	Macroscope Kiosk			
Black case with aluminum trim	Elo 46" screen			
	Stand with shelf			
	Alienware computer			
	2 hex keys, 6 screws for base + monitor installation			
	Headphones, keyboard, mouse, Kensington lock, and display board			
	power cords for screen (connected) and computer, Touch USB cable (connected), HDMI Cable (connected), DVI cable, audio cable, additional touch screen power cords			

Please email the completed report to Lisel Record at recorde@indiana.edu, or mail to:

Lisel Record
Indiana University, CNS, SICE
Luddy Hall 4016
700 N Woodlawn Ave
Bloomington, IN 47408, USA