Installation Guidelines (MySQL database & Archivists' Toolkit client)

Understanding the Toolkit Architecture

The Archivists' Toolkit requires both a client and database to function. The client is installed on your work computer; the database can be installed on either a networked server or locally on your work computer. The client provides the interface that you interact with, and the database stores the data you enter.



Installing the Archivists' Toolkit requires several key steps:

- 1. Downloading and installing the Archivists' Toolkit client available from http://archiviststoolkit.org/download/release/2_0
- 2. Downloading the MySQL server and MySQL Administrator from http://www.mysql.com/downloads (Select MySQL Community Server - free download)
- 3. Installing the MySQL server
- 4. Configuring the MySQL server
- 5. Creating a MySQL database
- 6. Initializing the MySQL database to work with the Archivists' Toolkit client
- 7. Launching the AT and pointing to the MySQL database

*Note: Ask for local technical assistance if you have access to it. Otherwise, progress through the installation guidelines slowly and carefully. There is a high risk of frustration if you do not enter a setting correctly.

Note: These steps have to be done only once, with the exception on entering the user name and password in step 7, which has to be every time the application is launched.

Note: The following guidelines describe installing the AT on a Windows or OS X machine.

 Download the Archivists' Toolkit client applicable to your operating system from <u>http://archiviststoolkit.org</u>. If you are unsure whether you have Java already installed, select the download that includes Java VM. Double click on the download file and install the application of your machine.



Double click on the file to download, then this window will open. Click on 'Save file'.



2. Downloading MySQL database server

- Open the MySQL download page at http://www.mysql.com/downloads/
- Select download under the **MySQL Community Server** label and follow the link to the download.



- Select download for the type of installation (Windows, Linux, MAC, etc.). For Windows, download the Windows (x86) ZIP/Setup.EXE. For MAC users, determine your exact OS X version before downloading and download the .dmg package of the mysql-max.
- You will be prompted to become a registered user. This step is optional.
- Download mysql-gui tools from: <u>http://dev.mysql.com/downloads/gui-tools/5.0.html</u>. The installer is added to targeted area of client computer (or the .dmg disk image file for Mac OS X).

3: Installing MySQL Database Server (for Mac with OS X 10.4.*, there are more in depth command line instructions to be found at

http://developer.apple.com/internet/opensource/osdb.html)

Windows	Mac			
PC users	Mac users			
 Unzip the Windows (x86) ZIP/Setup.EXE and double click the install icon. MySQL server 5.0 setup wizard will be launched (see figure 1) 	 Double-click the downloaded mysql-max- *.dmg file Double click the mysql-max*.pkg icon (see figure 2) 			



4: Configuring MySQL Database Server Locally (for a networked installation see section 8)

Windows		
PC us	sers	Mac users
•	You should see the MySQL Server Instance Configuration Wizard (if not you may find it in start/programs/MySQL/ MySQL Server Instance Configuration) Click on Next	 Double click the MySQLStartupItem.pkg icon The OS X installer will open. Click continue until installation finishes
•	Select option for "Detailed Configuration" and click on Next	 Double click the MySQL_prefPane.pkg icon
•	Select option for "Developer Machine" and click on Next	The OS X installer will open. Click continue until installation finishes. The System Preferences will now contain an ison for MySQL. When you see the
•	Select option for Multifunctional Database and click on Next	prompt shown below (figure 3) and it states that "The MySQL Server Instance is stopped." click the Start MySQL
•	Accept Default Drive and Path settings and click on Next	Server button and make sure that "Automatically Start MySQL Server on Startup" is clicked. The prompt should
•	Select Decision Support (DSS)/OLAP and click on Next	then state that: "The MySQL Server Instance is running."
•	Accept selection of Enable TCP/IP Networking , Port number = 3306 , and Enable Strict Mode and click on Next	MySQL MySQL Server Status The MySQL Database Server is currently stopped. The MySQL Database Server is currently stopped.
•	Select Best Support of Multilingualism (supports the UTF8 character set used by AT) and click on Next	Start MySQL Server Instance is stopped Start MySQL Server Start MySQL Server Vou may select to have the MySQL Server on Startup You may select to have the MySQL server start automatically whenever your computer starts up.
•	Select Install as Windows Service and Include Bin Directory in Windows PATH and click on Next	Figure 3
•	Select Modify Security Settings and enter and confirm a Root password. Make note of this password, as it will be need to entered into the MySQL administrator	 Open the downloaded MySQL gui tools .dmg file and a window will open that will prompt you to drag the application icon
•	<i>If installing in a network environment</i> (see section 8) select Enable root access <i>from remote machine</i> . Otherwise, leave it unselected.	into your Applications folder.

		MySQL GUI loois for 5.0
•	Click on Next	
·	Click on Execute	
lf you	receive a "Connection Error" because a	
firewa	all is prohibiting access to	To install the applications drag the MySQL Tools folder to your Applications folder.
port 3	3306, you will have to change the settings	You may then "Eject" and throw away this disk image.
lelse,	skip to step 5]:	© Copyright 2006 by MySQL AB. All rights reserved.
lo do	so on Windows machines:	This software is released under the GNU General Public License (GPL), which is probably the best known Open Source license. The formal terms of the GPL license can be found at http://www.fsforg/licenses/.
0	Open the Control Panel	
0	Open Windows Firewall	Figure 4
0	Click on Exceptions tab	• Open the MySQL Administrator now
0	to make sure MySOL doos	installed in your Applications folder.
	not appear	Upon opening, you will first be prompted
0	Click on "Add Port" button	to sign in.
0	Enter "MySQL" as name	
0	Enter "3306" as Port number	• For local installation enter "localhost" in
0	Accept selection of TCP	the server hostname box.
0	Click on OK	
0	Review list of programs and services	• Enter port 3306 (or whichever port you
	to make sure MySQL now	wish to use)
0	appears there	Cian in as "reat" and enter a necessary (If
0	Click OK	• Sign-in as root and enter a password (if
0	Return to MySQL configuration wizard	you have never established tool as a
0	Click on "Retry" on "Connection Error"	
		Connect to MySQL Instance
0		MysqL
		Administrator
		Stored Connection: (last connection)
		Server Hostname: localhost Port: 3306
		Username: root
		Password: ••••••
		More Options:
		(Cancel) Skip
		Figure 5

5. Creating a MySQL database



Figure 9

MySQL Administrator 1.	.2.8
Mysqu Administrator	\bigcirc
Connect to MySQL Serv	ver Instance
Stored Connection:	· · · · · · · · · · · · · · · · · · ·
Server Host	localhost Port: 3306
Username:	root
Password:	
Details >>	OK Clear Cancel

Figure 8

- For this local installation enter "localhost" in the server hostname box.
- Enter port 3306 (or whichever port you chose in step 3)
- Sign-in as "root" and enter the password you established for "root" in step 3.
- After signing in, you will be shown your connection settings to the MySQL server you have just installed and started (see figure 11 below).



Figure 11

• Click **Catalogs** (figure 11) in the top menu. This will list all the MySQL schemas or databases found in your system (figure 13). You will then add a schema for your Archivists' Toolkit installation to your system. Click **Catalogs** (figure 6) in the top menu. This will list all the MySQL schemas or databases found in your system (figure 7). You will then add a schema for your Archivists' Toolkit installation to your system.



Figure 10

- Click the "plus sign" to create a new schema or database
- You will be prompted to name the schema any name you wish. In this example "toolkit" is used.

	Create Schema
New Schema Name:	toolkit
	Cancel OK

Figure 12

 Click "OK." You will then see your schema in the **Catalog**. You have now created a database that you will configure using a configuration application from the downloaded Archivists' Toolkit application.

 Right mouse click in the Schemata list as shown below (see figure) If an an		
 Figure 13 Click Create New Schema to create a new schema or database You will be prompted to name the schema any name you wish. In this example "toolkit" is used. Figure 15 Click "OK." You will then see your schema in the Catalog. You have now created a database that you will configure using a configuration application from the downloaded Archivists' Toolkit application. 	Right mouse click in the Schemata list as shown below (see figure)	
 Figure 13 Click Create New Schema to create a new schema or database You will be prompted to name the schema any name you wish. In this example "toolkit" is used. Create new Schema Figure 15 Click "OK." You will then see your schema in the Catalog. You have now created a database that you will configure using a configuration application from the downloaded Archivists' Toolkit application.	Index: Rest: Data length Update test: Index: Rest: Rest: Rest: Rest: Index: Rest: Rest: Rest: Rest: Index: Rest: Rest: Rest: Rest: Index: Rest: Rest: Rest: Rest:	
 Click Create New Schema to create a new schema or database You will be prompted to name the schema any name you wish. In this example "toolkit" is used. Freate new Schema Tool Tool	Figure 13	
 Click Create New Schema to create a new schema or database You will be prompted to name the schema any name you wish. In this example "toolkit" is used. Create new Schema Terms Terms		
 Click Create New Schema to create a new schema or database You will be prompted to name the schema any name you wish. In this example "toolkit" is used. Create new Schema reme for the new schema. Schema name: lookid cancel Figure 15 Click "OK." You will then see your schema in the Catalog. You have now created a database that you will configure using a configuration application from the downloaded Archivists' Toolkit application. 		
 You will be prompted to name the schema any name you wish. In this example "toolkit" is used. Create new Schema Internet Internet	Click Create New Schema to create a new schema or database	
Create new Schema Image: Please enter a name for the new schema. Schema name: toolkit Image: Toolkit Toolkit Image: Toolkit Toolkit Toolkit application.	• You will be prompted to name the schema any name you wish. In this example "toolkit" is used.	
Figure 15 Click "OK." You will then see your schema in the Catalog . You have now created a database that you will configure using a configuration application from the downloaded Archivists' Toolkit application.	Create new Schema Please enter a name for the new schema. Schema name: toolkit OK Cancel	
Figure 15 Click "OK." You will then see your schema in the Catalog . You have now created a database that you will configure using a configuration application from the downloaded Archivists' Toolkit application.		
Click "OK." You will then see your schema in the Catalog . You have now created a database that you will configure using a configuration application from the downloaded Archivists' Toolkit application.	Figure 15	
Click "OK." You will then see your schema in the Catalog . You have now created a database that you will configure using a configuration application from the downloaded Archivists' Toolkit application.		
application from the downloaded Archivists' Toolkit application.	Click "OK." You will then see your schema in the Catalog . You have now created a database that you will configure using a configuration	
Toolkit application.	application from the downloaded Archivists'	
	Toolkit application.	

6: Initializing database for the Archivists' Toolkit

To proceed, you must have downloaded and installed the Archivists' Toolkit application.

Find the "Archivists' Toolkit application folder that will by default be in the "Program Files" directory on the PC or the "Applications" folder on the Mac. Double click: Maintenance Program 2.0. (If you chose another location during installation of the AT application, navigate to where you pointed the installer and locate the Initialize Database application.)

Name	Date modified	Type	Size	
🕌 bin	6/20/2012 2:19 PM	File folder		
u conf	6/20/2012 2:19 PM	File folder		
🎍 jre	6/20/2012 2:19 PM	File folder		
Jib lib	6/20/2012 2:19 PM	File folder		
logs 🖉	6/20/2012 2:20 PM	File folder		
🎍 plugins	6/20/2012 2:19 PM	File folder		
🎍 reports	6/20/2012 2:19 PM	File folder		
퉬 Uninstall_Archivists Toolkit 2.0	6/20/2012 2:19 PM	File folder		
Archivists Toolkit 2.0	6/20/2012 2:19 PM	Application	114 KB	
Archivists Toolkit 2.0.lax	6/20/2012 2:19 PM	LAX File	6 KB	
🥘 atcli	6/20/2012 2:19 PM	Application	113 KB	
atcli.lax	6/20/2012 2:19 PM	LAX File	6 KB	
HSQLManager	6/20/2012 2:19 PM	Application	114 KB	
HSQLManager.lax	6/20/2012 2:19 PM	LAX File	6 KB	
lax lax	6/20/2012 2:19 PM	Executable Jar File	50 KB	
💽 Maintenance Program 2.0 🌖	6/20/2012 2:19 PM	Application	114 KB	
Maintenance Program 2.0.lax	6/20/2012 2:19 PM	LAX File	6 KB	
💿 ReleaseNotes	6/15/2012 11:50 AM	Chrome HTML Do	3,142 KB	

 Once opened, the application will prompt you for the connection URL, Username and Password.

$\Theta \odot \Theta$	
Steps	Database Connection Information
1. Database Connection Information 2. Repository Information 3. User Information	Connection URL Username
	Password
	Please enter the database connection url
	Cancel < Prev Next > Finish

- Enter the database location and database name in the Connection URL box. For this local installation example, enter: jdbc:mysql://localhost:3306/toolkit (where "jdbc:mysql://localhost" is the location of the MySQL server you have installed, "3306" is the port where the server is accessed, and "toolkit" = the database you created when configuring MySQL).
- Enter the User name: "root" in the Username box

- Enter the Password you earlier assigned to "root"
- Click on Next
- Enter your full repository name in the corresponding box.
- Enter a short version of the repository name in the box below.

1							×
Steps	Repository Informa	ation					
1. Database Connection Information 2. Repository Information 3. User Information	Repository Name Short Name	Archivists'T AT	oolkit				
				< Prev	Next >	Finish	Cancel

- Click on Next
- Enter an Archivists' Toolkit user name (in this example "snowman")
- Enter a password (in this example "melts")
- Enter the password again to confirm it.

4		
Steps	User Information	
1. Database Connection Information	User Name	snowman
3. User Information	Password	melts
	Password again	melts
		< Prev Next > Finish Cancel

This user name and password are different than those for the MySQL database. They are for the AT client. Thus, it is best if they are different than those used for the MySQL database. Make note of the values used for user name and password, as they will be required for connecting the AT client to the database below.

- Click on finish
- The program will begin to initialize the specified database. The bar at the bottom of the dialogue box will indicate the progress of the process.
- A successful initialization will conclude with the summary dialogue box indicating "Success." (misspelled in this screenshot)

<u>*</u>		
Steps	Summary	
 Database Connection Information Repository Information User Information 	Sucess	
	< Prev N	Next > Finish Close

Click Close

7: Launching the AT and pointing to the MySQL database

Find the application icon and launch the Archivists' Toolkit application. (Windows installation by default creates this launch icon in the start menu, programs/Archivists' Toolkit. OS X installation by default creates this launch icon in the Applications folder.) The application launches with the "splash" screen below.



- The AT will recognize that this is the first time it has been launched and prompt the user to configure the application.
- The Connection Settings prompt will appear over the splash screen.

al		
Administration	Connection Settings	
Database Properties		
Connection URL	jdbc:mysql://localhost:3306/toolkit	
User Name	root	
Password	password	
	OK Cancel	

- Enter the values used for initializing the database in step 6 in the Connection Settings fields.
- Connection URL: jdbc:mysql://localhost:3306/toolkit
- Username: "root"
- Password: [the password you set for root] Note: these values have to be identical to what was
 used for initializing the database or the connection will fail.
- Click on **OK**
- The User logon dialog will appear next.
- Enter your User Name and Password into the Archivists' Toolkit user logon dialogue; this is the same username and password specified during the database initialization process above. Note, the user name and password must be identical to those used in the initialization process, or the connection will fail.

<u>a i</u>			×
User Name			
Password			
Select Se	rver	Cancel	Login

- Click on Login
- The client will continue to load its component parts and then the initial screen will open on the desktop

Archivists' Toolkit - 2.0.0 - up	oda	te 14					
File Import Setup Reports T	ools	s Help					
Search 🔝 List All	Ne	ew Record 🔲 Reports	Delete Merge	Filter	search results		
1 Names		🚨 Names					
Subjects		0 Record(s)					
Accessions		Sort Name	Name Type	Source		Rules	
Resources							^
Digital Objects							
							-

• Congratulations! You have successfully created an AT database and connected the Archivists' Toolkit client to it. From this point forward, consult the Archivists' Toolkit user manual for directions in creating, editing, manipulating records and working with the application generally.

8: Networked implementation

For a network installation in which the AT application will be used by different remote computers:



• Open "MySQL Command Line Client" from programs menu

- Enter the password you specified for the root password and hit return. A welcome message will be returned followed by a MySQL prompt: "mysql>"
- Create an empty database by entering the command:

```
create database [DB NAME] default character set 'utf8'
default collate 'utf8 general ci';
```

("[DB NAME]" can be assigned to any name you choose; however, the name needs to be expressed in all uppercase characters)

```
grant all privileges on [DB NAME].* to
'[YourUserNameHere]'@'%' identified by
'[YourPasswordHere]' with grant option;
```

```
• Hit return.
```



Note: The second user definition allows for multiple users to access a single machine. This is desirable for a networked environment. But it does create certain security risks to the machine hosting the database. It is best to consult with your network administrator before implementing this user definition.

Using the IP address of a networked machine, other users on the network may connect to the database in the following manner: substitute a the IP or server address of the machine that stores the database, and where you see **localhost** in the connection setting prompt shown below, enter that address. For example: jdbc:mysql://122.100.0.1:3306/toolkit, where 122.100.0.1 is the machine that holds the network accessible database "toolkit".

at less the second s				
Administration		Connection Settings		
Database Properties				
Connection URL	jdbc:mysql://localhost:3306/toolkit			
User Name	root			
Password	password			
		OK Cancel		