VIVO 1.8.x Documentation

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Introduction

This document tells you how to install VIVO on your computer.

- The introduction explains a few concepts about VIVO, how it is structured, and how it is built.
- The section entitled A simple installation describes a standard, simple installation for those who just want to get VIVO up and running.
- The section called Installation options describes several choices; some for production installations of VIVO, and some for developers who are working with VIVO on their desktops.

For information about this release, consult the VIVO 1.8.1 Release Announcement. Links to this and other documents can be found on the support page at VIVOweb.org.

These instructions assume that you are performing a clean install. If you are upgrading an existing service, please consult the Upgrade Instructions for VIVO release 1.8. VIVO may not work as expected if you install over an an earlier version.

How is VIVO distributed?

VIVO Source code

The latest release of VIVO can be found at the download page of VIVOweb.org. VIVO is distributed as source code, which you will use to build the application. This is because almost all site want to add their own customizations to VIVO.

These instructions will lead you through the process of building and installing VIVO.

Virtual appliance

VIVO is also available as a "virtual appliance", which you do not need to build. We rely on the VIVO community to create new versions of the virtual appliance, so you may not find one that contains the latest release of VIVO. The latest virtual appliance can be found at the download page of VIVOweb.org

VIVO and Vitro

VIVO is a research networking application that is built around a general-purpose RDF editor and browser named Vitro. VIVO packages Vitro with a display theme, an ontology, and many customizations. You will see references to Vitro occasionally in the installation instructions. For example, setting a property named `vitro.home` where you might expect to see `vivo.home` instead.

Remember that VIVO is a customization of Vitro.

Where will VIVO be on your computer?

Before beginning the installation, you should be aware of the four locations on your computer that will hold VIVO.

The VIVO distribution directory

This is created when you unpack the VIVO distribution file (see Download the VIVO source code, below). This is where you will create your build.properties file (see Specify build properties), and where you will make any modifications to the VIVO theme or code. You can create this wherever you choose.

VIVO inside Tomcat

When you run the build script to compile and deploy VIVO (see Compile and deploy), the files will be deployed to a directory inside Tomcat. This is the actual executing code for VIVO, but you won't need to look at it or change it. If you need to change VIVO, make the changes in the distribution directory, and run the build script again. Tell the build script where to find Tomcat by setting `tomcat.home` in the build.properties file (see Specify build properties).

The VIVO home directory

This directory contains the runtime properties for VIVO. VIVO will also use this area to store some of its data. Uploaded image files are stored here, and the Solr search index is stored here also. This is also a place for the files of RDF data that will initialize the VIVO knowledge base. You can create this wherever you choose. Tell VIVO where to find the home directory by setting `vitro.home` in the build.properties file (see Specify build properties). You must create this directory before starting VIVO. You must create the `runtime.properties` file in this directory (see Specify runtime properties), and you must ensure that Tomcat has permission to read and write to this directory when it runs.

The VIVO knowledge base

Nearly all of the data that you enter into VIVO will be stored in a special database called a "triple store". Most installations use MySQL to hold the triple store.. The actual location of this data depends on what system you have, and on how you install MySQL (see Install required software). You will access the data through VIVO, or occasionally through the MySQL client application.

Depending on your Installation options, these four locations may be in different places, or may be specified in different ways. They may even exist on different computers. Regardless of the options, these four locations are important for any installation of VIVO.

After the installation, what next?

When you have VIVO up and running, please read the Site Administrator's Guide.

A simple installation

How to get VIVO up and running on your computer, for testing or experimentation, or just to learn how to do it.

VIVO 1.8 Installation options

These options can make VIVO more scalable, add features, or run VIVO in a different environment.

- Linking user accounts to VIVO profile pages — Configure VIVO so each user can edit their own profile page.
- Running VIVO behind an Apache server — Add a reverse proxy, to add a layer of security, allow fine control over your site's URL, and provide a layer for additional network modules.
- Using an external authentication system — VIVO can be configured to work with an external authentication system like Shibboleth or CUWebAuth.
- Tuning the database connection pool — The number of database connections can affect VIVO's speed.
- Using a different data store — VIVO can work with databases like Oracle or SQL Server, or with other types of triple stores.
- Developers' installation: obtaining VIVO source code from Git — Some people prefer to work with the very latest source code.
- Building VIVO in 3 tiers — Add a third layer to the VIVO distribution, to keep all of your modifications in one place.
- Building a VIVO distribution for other servlet containers — Some sites prefer to use a container like GlassFish or JBoss, instead of Tomcat
- Activating the ORCID integration — If your site is a member of ORCID, you can activate the ORCID Integration code in VIVO.
- Adding OpenSocial gadgets to VIVO — Instructions for connecting VIVO and Open Research Networking Gadgets
- VIVO in a language other than English — VIVO can display pages and data in different languages.
- Other installation options — An assortment of installation options that aren't necessary for your first installation, but might be helpful later.

Upgrading VIVO to release 1.8.1

Upgrading from Release 1.7 to Release 1.8.1

Upgrading VIVO from release 1.5 to release 1.8.1

VIVO 1.6 introduced substantial changes in the ontology – VIVO 1.8 makes it easier for sites that are still at VIVO 1.5 to make the change.