IT-Training for Kabul Museum administrators, Vienna, June 2010
Final Report

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A training course for the Kabul museum IT staff was held at the Department of Art History at the University of Vienna in June 2010. This report intends to summarize the goals of this course, both as they were achieved and as they were planned. The basic structure of the course and the timetable was planned by me, **Sean Mc Allister**, and was basically a continuation of a similar training program that was conducted by me in October 2008 at the JNU in New Delhi for 3 curators of the Kabul Museum.

Objectives

Training Course:

Even though the JNU course was seen as a success by the participants we felt more in-depth training of the museum's staff was needed in order for the program to be successful. Based on my personal experience at the museum and the qualifications of the two staff members selected for the training, the following list of topics was created for the training course:

1   Hardware training, assembling of personal computers, basic computer networking topology
2   Installation and configuration of some common operating systems (Windows, Linux)
3   Installation and configuration of common software on these operating systems
4   Working in a multiple-language computer environment (English, Dari) and configuration of software packages and operating systems to support doing so
5   Configuration of small- to medium-sized computer networks

Inventory Project:

Another objective of the program was to create a simple, database-driven inventory for the museum. This inventory is intended to supplant a system introduced in 2005 by former museum staff members that was plagued by multiple problems that eventually caused the system not to be used. The lack of documentation and source code for the previous system led to the decision that a rewrite of the software would be the best approach. The basic system design was created during the JNU training course in 2008, based on a requirements analysis conducted together with the museum staff and a review of the inventory cards as they are currently in use. The lack of time and technical infrastructure at the JNU did not allow the system to be completed in 2008. Although progress was made and a working system was presented and delivered to the curators by the end of the Delhi course, the remaining problems of the database system coupled with a lack of technical knowledge by museum staff effectively prevented the deployment of the system at the museum.

Thus, the objectives of the Vienna course were the following:

1   Completion of development of the database-driven inventory system for the National Museum of Afghanistan.
2   Delivery of a more stable software system with ample documentation that can be extended and maintained from abroad (i.e., ensuring the ability to provide software updates, as database content and real inventory data are stored only at the museum. This was a requirement stipulated by the Museum's director, Mr. Masoudi)
3   Creation of a readily deployed system that can be easily integrated into the museum's network, both for use as a local workstation as well as a central inventory server, if the need arises.
4   Training of the staff in the technology used for the system. This should help them in fixing minor problems.

Training Course

Most training sessions were conducted alternately by **Daniel Terkl** and **Matthias Noe**. The two participants were Mr. **Mansoor Alemy** and Mr. **Ezathullah Sharifi**.

Mr. Terkl is a former member of a digitization project housed at the Department of Art History where he was responsible for technical issues. Mr. Noe is a professional trainer for IT subjects at a local training center in Vienna. Both had the necessary qualifications to implement the training objectives.
Each day of the training program was split into a morning and an afternoon session, each approx. 3 hours in lenght. Overall there were 60 hours of general IT training.

Goals were defined in advance and were taught during these sessions (a table of achieved goals is available). In short, a large number of spare hardware parts were on hand for teaching the basics of assembling a PC. This knowledge should enable the curators to fix some hardware-related computer problems at the museum on their own. We then continued with setting up numerous operating systems on these computers, a task required of every system administrator on a regular basis. We chose both Windows operating systems as well as Linux distributions.

Curators were furthermore taught the correct configuration of networking interfaces using the operating system's tools. Continuing the networking basics we had them configure secure wireless networks using wireless routers of the same brands that are in use at the museum. The trainees should thus be capable of building a small network in a heterogeneous computer landscape on their own.

Furthermore, curators were trained in the use and configuration of some common software tools such as email clients, internet browsers, instant messengers and image manipulation software.

All lectures took into consideration the level of prior knowledge of the museum's staff and was referenced to the special needs of the Kabul museum. Although it was not possible to present a full course on systems administration, we believe that the staff members and also the museum will benefit from the additional skills taught in Vienna.
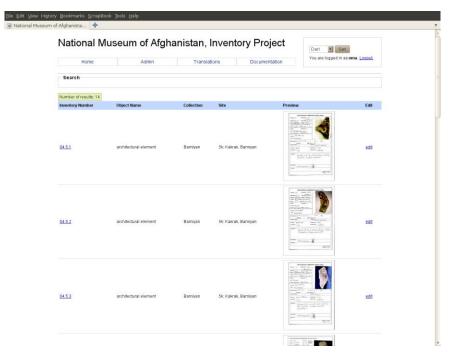
Inventory Project

On the basis of the work done in Delhi in 2008, on the available inventory cards and on the insights gained from my visits to the Kabul Museum, I created a database system that can be used locally and over the internet, if the museum so chooses. The aim was to deliver a simple system allowing the entry of the available inventory sheet in a structured way in both Dari and English. The system is based on the following software stack:

· Ubuntu 10.4
· Apache web server
· Django Web Framework
· Sqlite database

The source code repository for this system is hosted on our server in Vienna and can be updated whenever the administrators have a working internet connection at the museum. Access to the source code can be obtained at any time either through contacting me or another project member. The software is designed to be open source, but it still requires some clean-up before it can be released to the public.

As setting up such a software stack is generally not a trivial matter, it was decided to provide the curators with a low-cost workstation that would serve as a data-entry point as well as the main inventory storage. Since the museum does not have electricity 24 hours a day, and also because there is no requirement that the inventory to be online or even available outside of the working hours, this seems to be a cost-effective and usable solution. Additionally the curators were given an external hard disk drive that is to be used for backup purposes (images and database file).

The interface is web-based and bilingual and was also designed with simplicity in mind. The necessary translations to Dari were created by the administrators themselves. I intend to improve the software and supply updates to the museum as well as fix bugs that might have gone undetected.

Inventory listing in English

Object detail view in Dari (not 100% translated)