Chapter XV

Building the Network State

Dieter Spahni, University of Applied Sciences Berne, Switzerland

Abstract

The administration portal for Switzerland, www.ch.ch, is based on a powerful metadatabase of available resources and services of the public administration and allocates a unique name, the Uniform Resource Name (URN), to every resource. The URN:Technology, adapted to the requirements of www.ch.ch, has become an open standard and a building block of the Swiss e-government platform. This chapter shows why portals in widespread, long-established federal structures with decentralized responsibility for the resources and interlinking can benefit from the URN:Technology, enabling the implementation of the vision of a network state. In this chapter, a blueprint of the network state in Switzerland based on URN:Technology will be presented.

Introduction

After several years of concept design and development work, Switzerland’s administration portal, the Virtual Desk Switzerland www.ch.ch, was opened to the public in January 2003. Figure 1 shows the home page in German. The information presented, structured by subject (typically life events such as birth, school, work, etc.), leads the visitor step by step to the relevant information source in the public administration sector, be this in the Federal Confederation, in a canton or commune1. The portal is to be understood primarily as a guide. The number of links that must be maintained in this portal is enormous. Thus, for instance, each of the 2,880 communes responsible has to maintain links at the local level to all relevant subjects.
The URN:Technology outlined later in this chapter solves the maintenance problem with the aid of a central meta-database in which all portal partners (the Federal Confederation, cantons and communes) independently maintain the description of the resources they offer on the relevant subjects, in particular, providing the current valid address of the resources.

Resources vary from providing simple information and forms that can be downloaded to Web applications and Web services. Resources keep a unique name, the URN, which serves to identify them. The URN:Technology is particularly suited for cross-linking in complex and federally structured portals with decentralized responsibility for the resources and interlinking but is in no way limited to e-government in its application.

Similar to users locating appropriate services using the meta-database, developers will find Web services, respectively their interface descriptions, to integrate them into their own applications. In order to foster the coupling of distributed applications irrespective of available interfaces or data formats, a central transaction hub reduces system complexity, for example by converting data formats and providing store-and-forward capabilities to merge different media and channels.

Figure 1: The Virtual Desk Switzerland, www.ch.ch, provides explanatory texts in all four national languages (German, French, Italian and Romansch), leading the user step by step to the information source in the public administration sector in Switzerland.
Socio-Technical Determinants of Information Security Perceptions in US Local Governments
www.igi-global.com/article/socio-technical-determinants-of-information-security-perceptions-in-us-local-governments/167746?camid=4v1a