Building a portal for citizens in Norway with secure authentication and single sign on

Dag Efjestad
Norway

- 4.600.000 citizens
- Everyone has an unique id
- 75 % has a pc and 60% use it every day
- 60 % has Internet access at home
- 50 % has access to xDSL
Public sector in Norway

- About 1800 different organizations
- Three main levels
  - Local
  - Region
  - Central
- IT
  - Variations in size/complex/advanced
  - Often very independent institutions
  - Some common portals – Altinn/Region portals
Strategy documents - eGov
eNorway2005 – focus areas

- Make a good framework for eNorway
- Modernization of public sector
- Accessibility and security
- Attractive contents
- Skill for change
- Creating value in industry
Modernization of public sector

- User orientated digital services
- Coordination of the use of IT in the public sector
- Simplified reporting
eNorway2009 – focus areas

- The individual in the digital Norway
- Innovation and growth in Norwegian business and industry
- A coordinated and user-adapted public sector
The individual in the digital Norway

- All relevant public services shall be digital.
- Enable the vision of the digital citizen
  - From 2007 shall everyone be able to choose how to communicate with the public sector
- All services from the public sector shall be based on open standards
A coordinated and user-adapted public sector

- Interaction in the public sector shall be digital
- Public sectors shall use open standards
- Public sector shall use the security portal with a shared pki

http://odin.dep.no/filarkiv/254956/eNorway_2009.pdf
Before MyPage ....

- Many services are already established and many more is under development
- The organization of the services is product orientated not customer focused
  - You need to know public sector to find the service
- Lack of services where the citizen can get information from public sector
- No infrastructure for sending information
- No infrastructure for signature and crypt.
Before MyPage…

- Different passwords and authentication solutions
- Great variation of solutions and quality
- IT in public sector - separated in "silos"
- No common framework for interoperability and corporation
- Lack of coordination
- Marketing for e-services
Before MyPage ....
After MyPage …
MyPage – makes the day for the citizen

For citizens:
- Common portal – don’t need to know public sector.
- Don’t have to deal with different authentication mechanism
- Can get information about themselves that are registered in public sector

For public sector:
- Get more digital services in public sector and easier marketing against the public.
- Establish common architecture and standards for public sector.
Services on MyPage

- Access to information like: My Vehicles, My properties...
- Access to services like: apply for health card, apply for child support, apply for driver license....
- Information about my community
- Messages from public sector
- Important dates
Service types on MyPage

- Transaction service
  - Url to a service on another site with SSO.
- Data retrieval service
  - Webservice which retrieve data of the citizen
- Message service
  - A citizens mail box on Internet for public sector
- Calendar service.
  - Public and personal events
MyPage – software

- Sun JES 2005Q1
  - Portal server
  - Access manager
  - WebProxy med SSL
  - Application Server
  - Mail server
  - Calendar server
  - Directory server

- Fatwire Spark Web Content management
Web service

- Standardized web service call.
  - WS-I Basic Profile 1.1
  - Secured by VPN
- Next version
  - Liberty ID-WSF?
  - Not secured by VPN but WS-S
  - WS-I Basic Security profile 1.0
  - Also transactions
- Common registry UDDI/ebXML
- Use of a common tool and repository for creating schemas
Messages

- Based on ordinary e-mail
- Secured by VPN
- May use SSL for transport
- SMS and e-mail alerts
- Future:
  - web service based?
  - Secure enough for sensitive data
Transaction service

- Url to another web site
- Must use the security portal
- Language support
- WAI requirements
- Future:
  - Transaction services with web services
  - From schemas to web based transaction services
  - Combination of messages/calendar and transaction services.
Security portal

- Established as a service exclusive for public sector.
- User based or transaction based pricing
- Not only for MyPage
  - Altinn
  - Education
  - Portals for Local authorities/administrations
  - Gambling
- Need to have at least 5 million authentications per year to succeed.
Security Portal

Site A
- WebServer
- SAML integration Module
- eTrust SAML Affiliate Agent from CA

Site B
- WebServer
- SAML 1.0/1.1 Compliant product

SecurityServer
- Policy Server
- eTrust SiteMinder from CA
- eFactory Security Server from SPAMA
- AuthProviders
Authentication providers

- Certificate based authentication
- Certificate shall also be used for signatures
- Use existing certificates and authentication providers.
  - From Bank sector. Almost everyone with Internet access use banking solutions on Internet.
  - From public game company.
  - Soft certificates that you can download for free.
- Certificate types:
  - Person standard
  - Person high
  - Company
- All Authentication providers are qualified by an independent control institution.
Browser/artifact

- mypage.norway.no
  - Protected site
  - Access control

- Security portal
  - Front end

- Protected site
  - SAML Affiliate Agent

Citizen (browser)
Session maintenance

- eTrust siteminder expose to web services
  1. Session validation (every 20 sec)
  2. Session notification. Keep-a-live
     - No push to the Service providers

- Not an option for non-affiliate agent sites.
  - Common idle and session timeout
Singel logout

- No notification from Security portal
- Confusing for the user:
  - What happens when I close a window?
  - What happens if I do a logout from site X?
  - What is the difference between local and "global" logout?
- User has to close all browser windows to kill all sessions
Cookies and sessions
Solution…

- Affility agent sites use "shared session"
- "Global" logout page with frames with individual logout pages for the others like MyPage
- Plan for upgrade to SAML 2.0 and Liberty ID-FF v 1.2 is in progress.
Questions