

Inter-municipal e-Collaboration / Application sharing between Municipalities

1. Purpose of this document:

To describe best-practice case from inter-municipal e-collaboration and application sharing between the municipalities of Torsby, Sunne and Hagfors in Värmland, Sweden

2. Country and Region:

Värmland, Sweden

3. Issue:

The purpose of the project is to show rural municipalities that it is possible to share applications and competence regarding IT operation. From a transnational perspective it is of crucial importance that it is simple for other municipalities in Europe to learn about the procedure and how one can create similar solutions to be able to share competence, systems and IT techniques.

4. Approach / strategies / results:

The purpose of the project 'Inter-municipal e-Collaboration' is to share applications and services and to handle, manage and operate a system in one municipality, instead of three municipalities, which would increase the competence and save money regarding the operation of IT systems.

The project is interesting from a transnational perspective and will show that it is possible for small municipalities to go together and use the same IT systems and communication links.

Project goals:

1. To establish a high-speed broadband connection between the contributory municipalities, this will be the municipalities of Torsby, Sunne and Hagfors.
2. To establish a communication link to a common Internet Service Provider (ISP) and a communication link to a common supplier of an ASP-service for our staff offices.
3. To setup and install six different IT systems that the three municipalities use today, to be an installation at one of the municipalities instead of three separate installations at each of the municipalities.
4. To establish a common network between the three municipalities concerning security. The project will investigate whether it is possible to setup a mirroring between each of the local networks at each municipality. (The cost for this is falls outside the Baltic Rural Broadband project.
5. Learn how an administration of common IT systems best will be done.
6. Share our experiences from this project to other municipalities inside or outside Sweden.

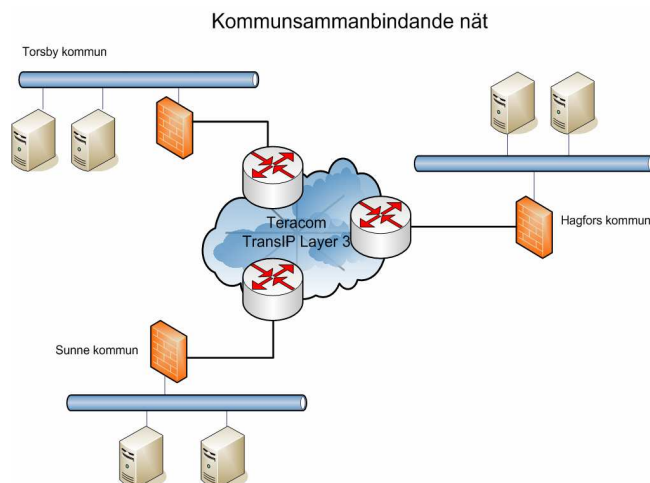
Implementation

The project is today running even better than expected. Torsby, Sunne and Hagfors municipalities have established solutions that well responds to the project goals listed above. The implementation of the e-collaboration/application sharing has been performed in six steps.

1. The first step in the project was to establish a high speed broadband connection between the contributory municipalities of Torsby, Sunne and Hagfors.

Result

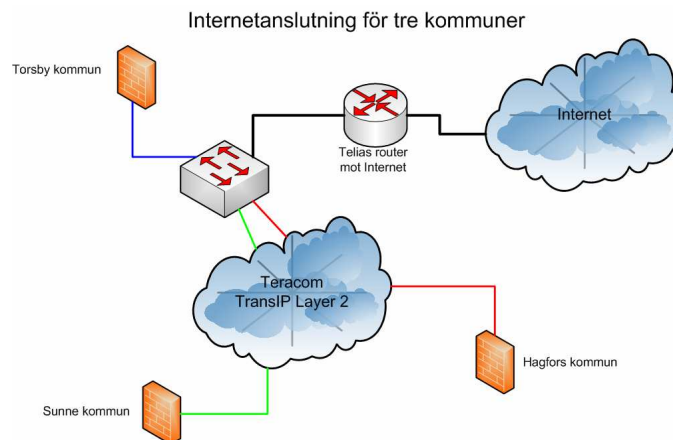
There is a broadband connection installed from the supplier Teracom. The capacity is 100 Mbit/s. Each municipality uses their own firewalls inside the common network.



2. The second step was to use the same connection to an ISP service and to a common supplier of an ASP service for our staff offices

Result

A common connection to the Internet (ISP) is used in order to save money (the provider is TeliaSonera). The connection will have a capacity of 100Mbit/s. The municipalities are using a special VPN connection beside the private (KSB-net). It is a service from the supplier Teracom called Trans-IP and it has a separate fast Ethernet access port. This communication is a switched line from Hagfors to Torsby and from Sunne to Torsby, and Torsby are responsible for all routing against Internet.



3. The third step was to setup and install six different IT-systems that the three municipalities use today.

Result

- a) A workflow system for e-Invoices that was used separately by each municipality.
- b) A Helpdesk system for IT service.
- c) A system for real estate data. It is a system that mostly is used by the Department of Rural Development Planning.
- d) An ERP system with a lot of end-users connected to it.
- e) A system that is handling all charging of services for refuse collection and clean water to all estates in the municipalities.
- f) A system for e-services for schools and child-care.

4. Step four was to establish a joint network between the three municipalities concerning security. The project will see if it is possible to set up mirroring between each of the local networks at each municipality.

Result

The technical solutions have been identified and procurement has been done. The three joint municipal systems are mirrored to a fourth site, where the same equipment has been built up.

5. The fifth step is to learn how an administration of joint IT systems best will be managed.

Result:

So far the municipalities have documented experiences from each installation and they are discussing how this will be managed in the future. This work will go on.

6. Another main system (a Social Care system) has been identified for application sharing. This is one of the most important systems in each municipality and it is also classified as a secret system and the security demand increases. This is a 24/7 system.

Result

The system will be installed week 43 this year. It has also given the result that security has to be improved at five different levels, which will be performed during the autumn this year.

- a) Redundancy (see point 4)
- b) Each municipality will have two independent firewalls, including IPS-systems.
- c) In-building patch and protection of the VM-Ware system where the classified server is hosted.
- d) E-id card for improved security, double authenticate and single sign on.
- e) Security education for the users.

7. The last step is to share the experiences from inter-municipal e-collaboration to other municipalities inside and outside Sweden.

Result:

Torsby, Sunne and Hagfors are sharing their work with other municipalities in Värmland in regular meetings. They have also been invited to two separate conferences in Stockholm this year, where we gave a presentation on the project.

The municipalities have also given presentations to interested partners in the project Baltic Rural Broadband.

5. Relevant keywords:

Inter-municipal e-Collaboration, e-Services, Application sharing

6. Main impacts:

Many areas of municipal operations show a cooperative potential within IT. The greatest areas of cooperative potential in Värmland are GIS (Geographic Information Systems), telephone services, the 24-hour governmental authority, distance education, electronic commerce, and IT in health care. The municipalities in Värmland have, in recent years, actively



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worked at taking advantage of the opportunities afforded by broadband technology, and by starting the joint project "IT Värmland", the goal of which is to contribute to economic growth, development of businesses and an increase in jobs. Joint broadband expansion has been ongoing among Värmland's 16 municipalities, where expansion has been divided into four groupings (North, East, West, and Central Värmland).

Two municipal groupings "North Värmland" and "East Värmland" have reached furthest in terms of cooperation. In "North Värmland" (Torsby, Sunne and Hagfors), cooperation is reached by sharing services/applications with one another. The solution has come about by separating the venues of operation for the various applications between the municipalities, in separate databases that in turn can be managed from all three locations. In addition, an agreement has been reached that no fees shall be charged between the three municipalities, but rather that by investing in joint services, the municipalities will split costs evenly. In "East Värmland" (Kristinehamn, Storfors, Karlskoga and Degerfors) cooperation is planned within the areas of salary administration, IT (including telephone services), purchasing, and accounts payable. Coordination has also been carried out for IT operations in Kristinehamn and Storfors, which means that all IT operations (including telephone services) take place via Kristinehamn. This union accounts for economic savings and an increase in quality, particularly for the smaller municipality of Storfors.

The strengths of Inter-municipal e-Collaboration are time saving, cost effectiveness, more operational safety and less vulnerability. Organizational profits surface in the form of increased quality, improved routines and services, and more attractive services due to increased specialization. Finally, better utilization of personnel resources, increased knowledge and experience exchange, as well as the shift in IT personnel from generalists to specialists reduces the need to buy services from external consultants.

In terms of inter-municipal e-collaboration, the vision for Värmland (for 2015) is, according to the IT experts interviewed, a common selection of e-services for all Värmland's municipalities through "IT Värmland" with Region Värmland as the principal. In order to fulfil this vision, an interactive platform of services needs to be developed, whereupon each municipality purchases the complete function/service that is needed and each municipality shares in the responsibility. All services and functions shall always be accessible for all municipalities in Värmland at the same price. The vision for e-cooperation between Värmland's municipalities covers a number of areas where cooperation can be the most advantageous and provide the greatest effect in terms of savings, joint development and resource/competency use. With *common purchasing*, uniformity is reached, which means that the municipalities become a more attractive counterpart for various vendors, and with *common systems administration*, the costs for licenses, products and resources are smaller. The municipalities shall in the future function as a resource centre for various types of common systems, with the aim of concentrating competency in one type of operational system in one



municipality. This also means that each respective municipality is responsible for assuring that there will be backup resources to minimize vulnerability during illness, holidays, and even lay-offs, for example.

7. Conclusions and Recommendations:

The current situation clearly shows a Värmland on the threshold of great challenges where savings must be made in a number of areas. Population statistics show that the percentage of taxpayers and employed people is diminishing, that the number of elderly is on the rise, and that large numbers of municipal employees will retire in the not so distant future. At the same time, the citizenry will be expecting more service and accessibility in line with the vision of a 24-hour a day governmental authority (e-Government). Earlier projects focusing on the development of e-services in the municipalities have clearly uncovered the need for cooperation. Other factors that impact the success or failure of inter-municipal e-collaboration have also been uncovered. A well-functioning broadband net is one condition for successful cooperation, while other conditions include standardised systems in the municipalities and the need for municipalities to be of comparable size with approximately the same economic resources. In addition, success is helped by the confidence and willingness to take new steps that come from discovering examples of properly functioning inter-municipal e-collaboration in the form of coordinated IT-based services. Positive personal chemistry between the involved partners is also important so that constructive dialogue and a clear willingness to cooperate is demonstrated and clearly outlined in a defined manner.

Parts of this project have been carried out within the framework for Baltic Rural Broadband project in Interreg IIIB, Baltic Sea Region.

8. Attachments:

PowerPoint presentation: "Baltic Broadband sutoha" (in English)

"Strategy Study: E-services in Värmland", chapter 3 (in English)

"Strategistudien E-tjänster i Värmland", kapitel 3 (in Swedish)



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