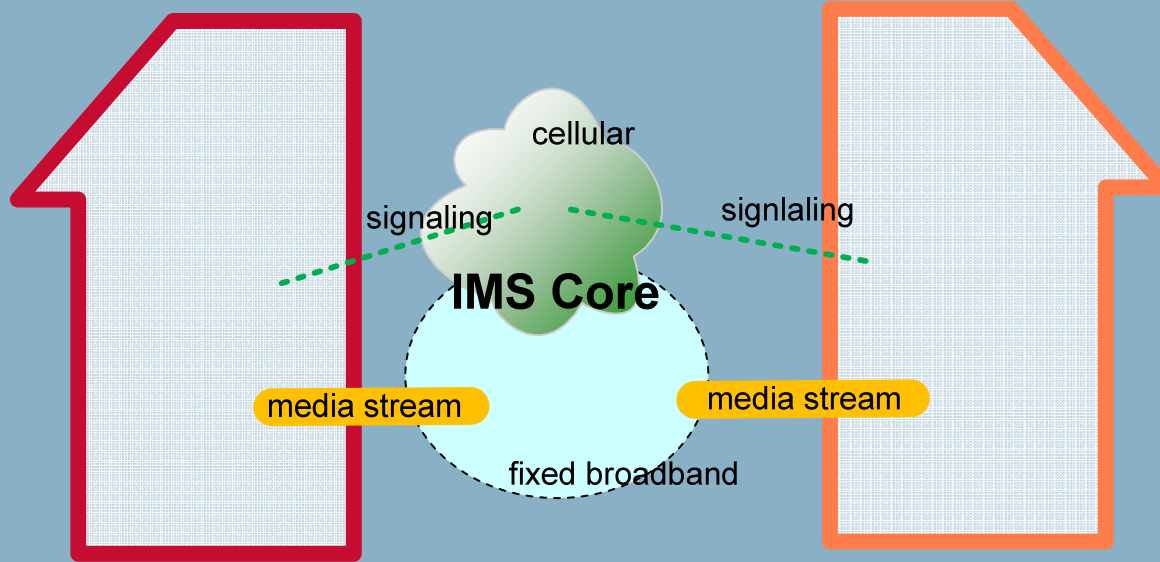


Remote environment (e.g. home)

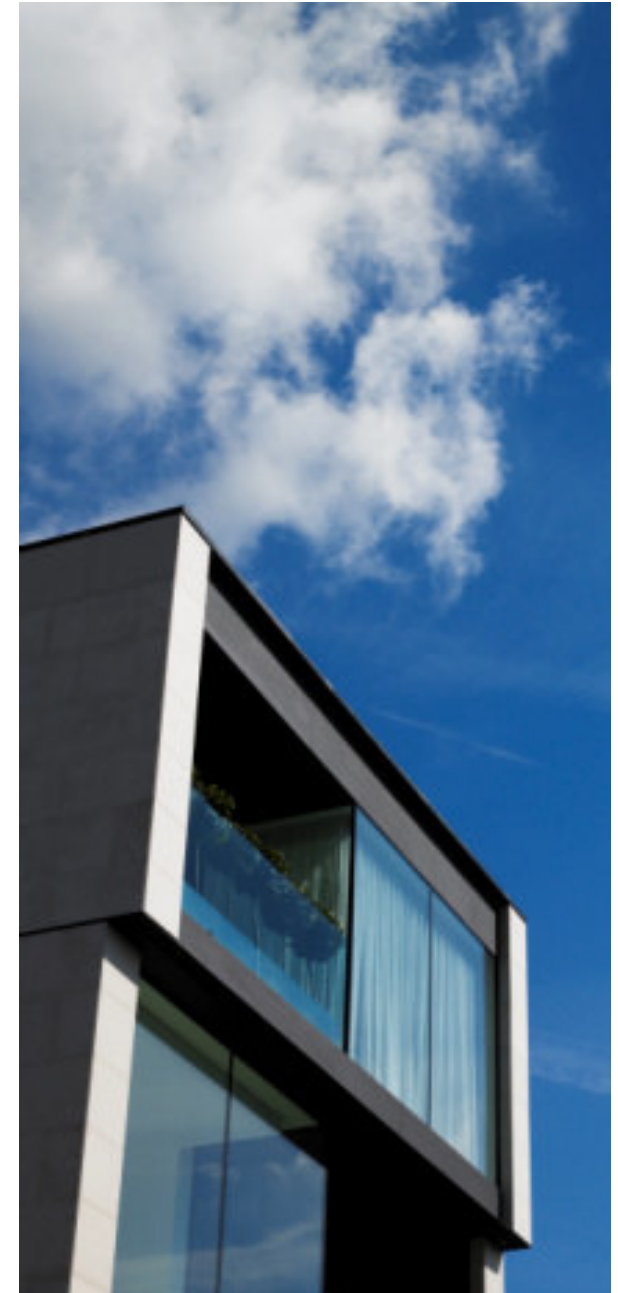
Local environment (e.g. friend's place, hotel)



Remote Service Usage Through SIP With Multimedia Access as a Use Case

Andreas Häber, Martin Gerdes, Frank Reichert,
Andreas Fasbender, Ram Kumar

andreas.haber@uia.no
ikt.hia.no/aml/

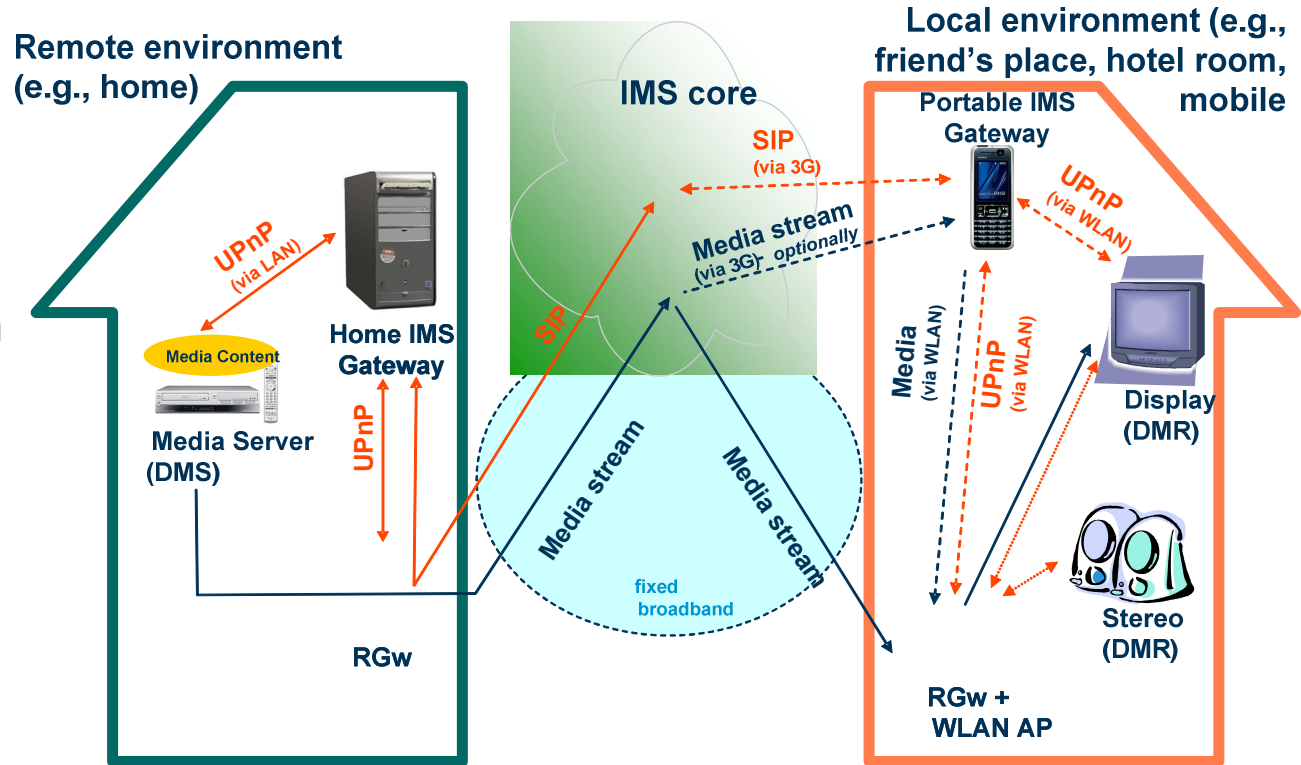


Agenda

- Use cases for remote access
- Remote access protocol
 - Design
 - Tests & Results
- Summary
- Questions

Remote access use cases

- ⇒ Consume remote services in a local network
- ⇒ Provide services from the local network
- ⇒ Remote and local service cooperation

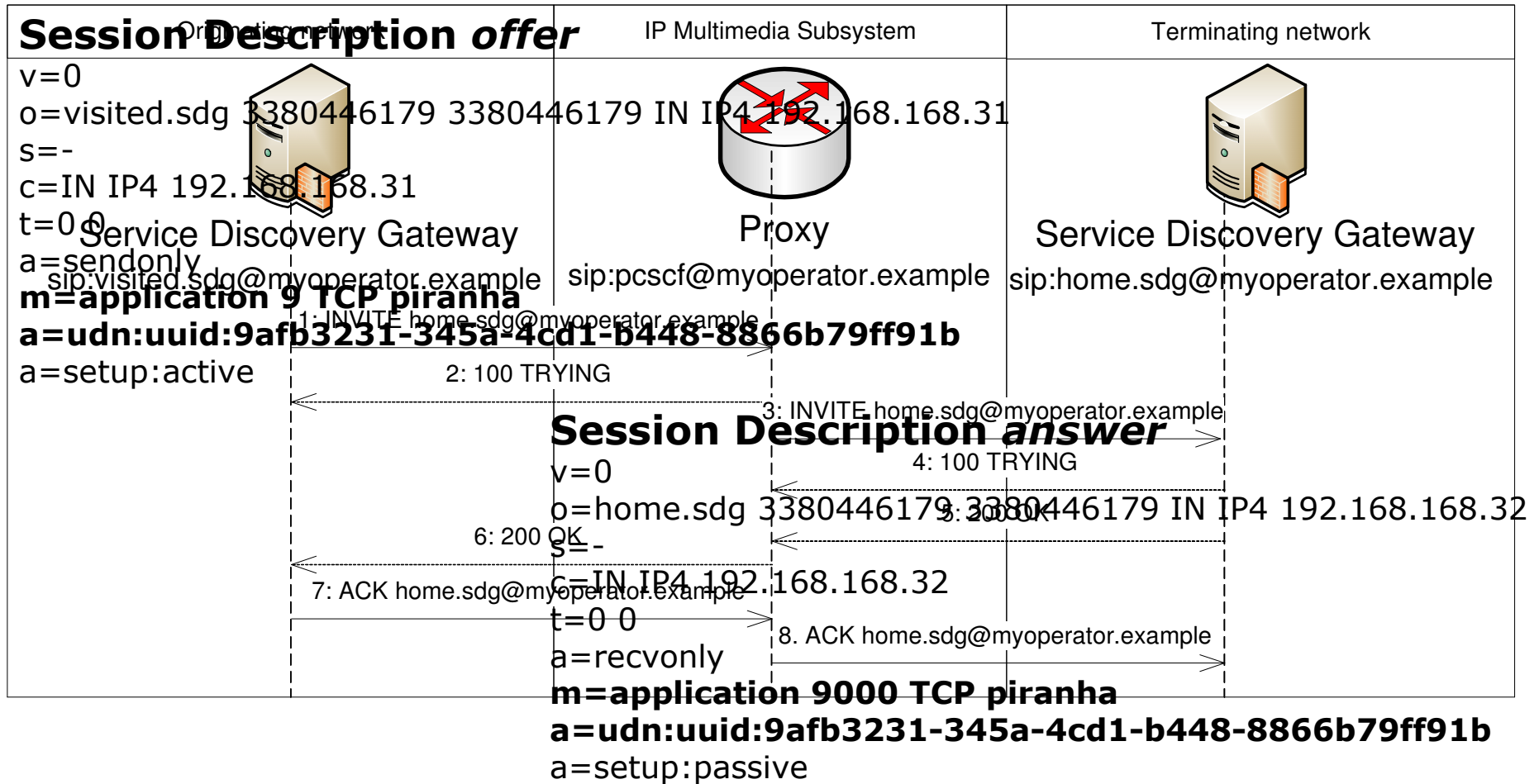




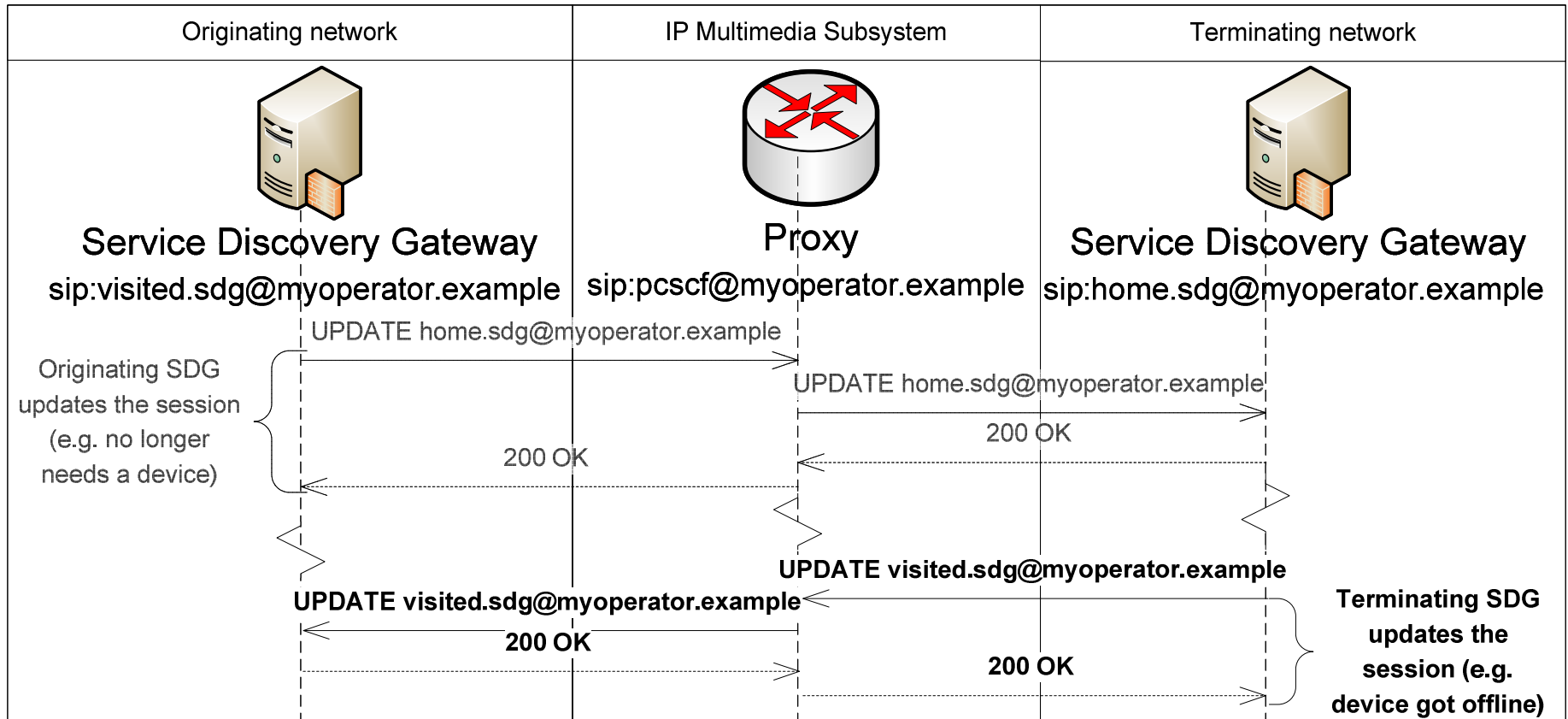
Remote Access Protocol

PIRANHA

Establishing a service invocation session



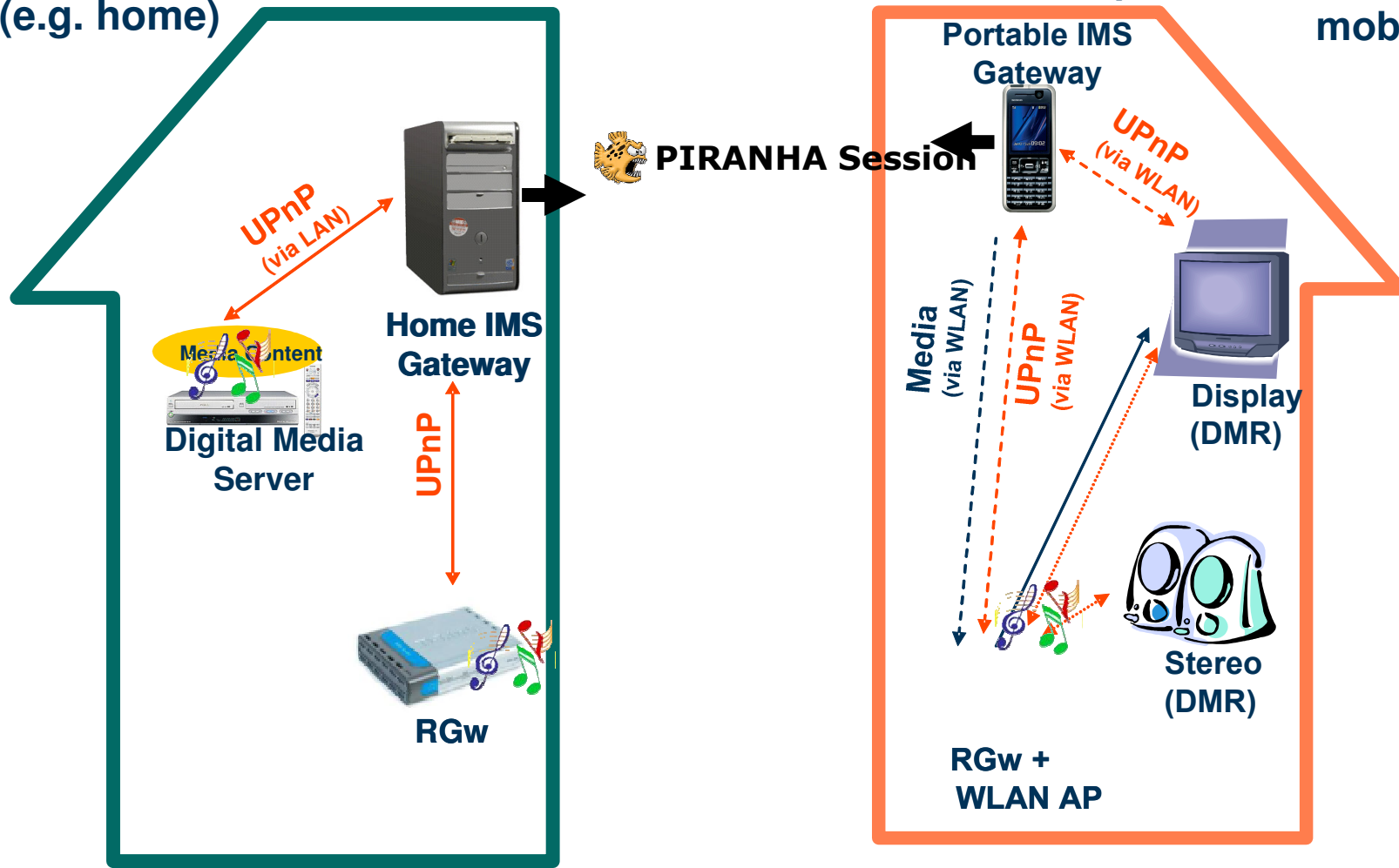
Updating a service invocation session



Remote Media Access between two homes (simplified!)

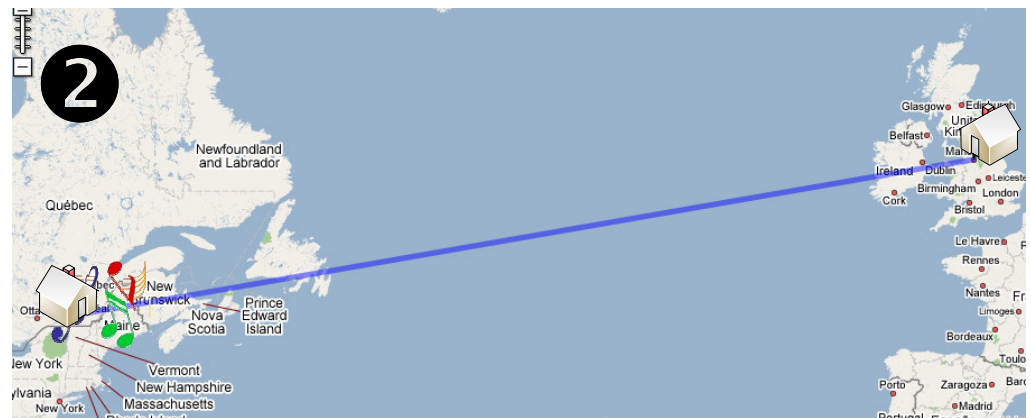
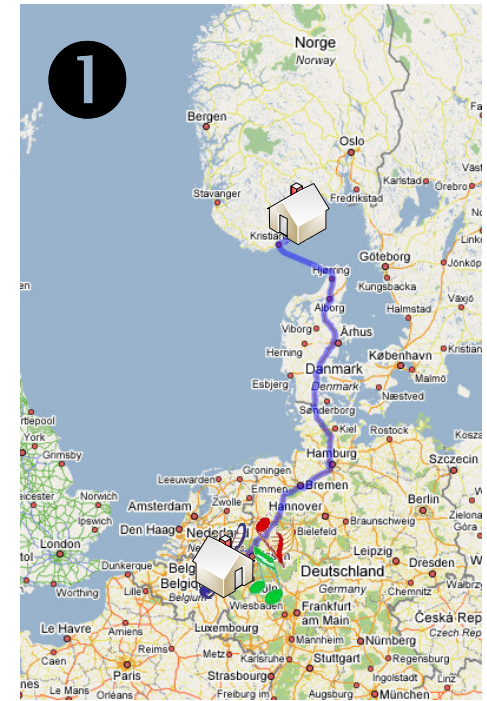
Remote environment
(e.g. home)

Local environment (e.g.,
friend's place, hotel room,
mobile)



Long-range remote access testing

- Streamed media from a remote UPnP A/V Media Server to a local UPnP A/V Media Renderer
 - 1) Streamed music from Ericsson Eurolabs Deutschland in Aachen, Germany to the University of Agder in Grimstad, Norway
 - 2) Downloaded a picture from Ericsson Canada Inc in Montreal, Canada to EMCC Software Ltd, Manchester, United Kingdom
- The traffic between the originating and terminating networks went through IPsec-tunnels
- No significant delays were encountered during our testing



Maps from: Google™ Maps: ©2007 Google – Imagery ©2007 TerraMetrics, Map data ©2007 Tele Atlas

Summary

- Motivated why remote access is necessary
 - The **Portable IMS Gateway (PIGA)** is important so you can bring it with you wherever you go
- Why do we need the *IP Multimedia Subsystem (IMS)* here?
 - First, our solution works with any SIP network
 - However, with IMS you get support for **authentication** of users, **addressing** of distributed services, and **Quality of Service**
- Shown an example of remote media access
 - Including a portable client
- Service discovery part is missing in our prototype
 - We have designed a solution based on *OMA Presence SIMPLE*
 - Gives **service presence awareness**, in addition to the existing *user presence*
 - Both service presence status & its capabilities are exchanged

Questions

