

Large-scale Federated Presence : Scalability, Virtualization and Externalization

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- "Presence" - key enabler for converged communications, revenue generation opportunity for IMS
 - Presence today is mostly expressed as online status.
 - Presence can convey a much richer spectrum of event notification / subscription
 - E.g. locating tracking, finding available experts in real-time.
 - Both services providers (e.g. device status, subscriber location) and enterprises (e.g. free/busy, expertise, availability) are rich sources of presence

- Project Goal : develop solutions for federating presence across enterprise and service providers in a secure, scalable way and explore different models for a collaborative presence offering (e.g. hosted offering, presence peering with enterprise)

Three key aspects:

- **High Scalability** : Scalability of presence federation is driven by both raw number of users as well as complexity of presence aggregation. This project will look at fundamental ways for improving scalability ranging from new presence server architectures to leveraging appliances, such as for offloading XML processing, e.g. DataPower XML appliance, or security processing using IBM ISS security solutions.
- **Virtual Presence** : The business value of this project is derived from the ability to offer 'virtual presence' - using a programmable federation engine to blend together any subset of presence attributes specific to each business scenario, this project will enable operators / enterprises to define 'virtual presentities' e.g a single virtual Help Desk entity whose constituent physical agents are spread across multiple presence systems : users do not see the individual agents, but rather see a single virtual HelpDesk presentity.
- **Enabling applications** to leverage the power of presence by creating an externally visible, presence representation for business/ IT processes in a controlled way, e.g a bank can export status of internal mortgage approval processes, to customers through an externally-visible presentity, or package delivery companies can export current location of a package through a presence-buddy on a client's cellphone.

