Task 1 – Mapping of the Connected Vehicle Landscape

Certification Program for Connected Vehicle
(RFP#: MW121410B)

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Task 1 Overview

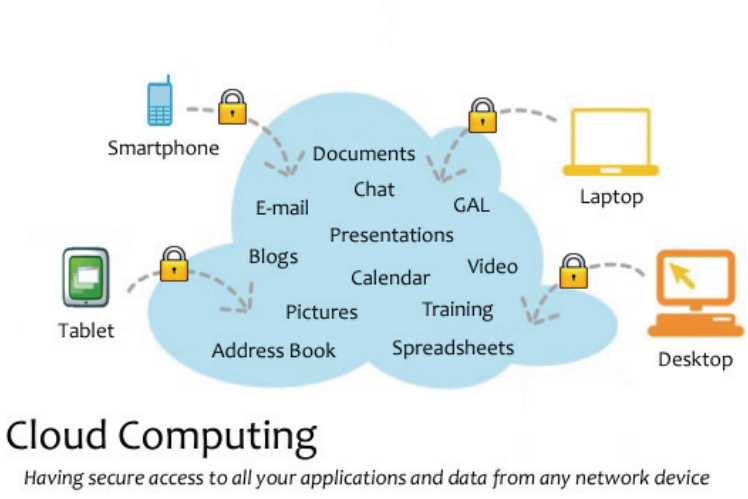
The objective of Task 1 is to provide a summary view of the interconnected initiatives that comprise the Connected Vehicle community. During our initial phone conference with the Pooled Study team it was clear that the group wanted more than a simple and static document. The team discussed "dynamic" and "actionable" work products that will enable the group to progress toward the goal of cooperative and intelligent transportation systems.

To that end, we constructed a series of interactive maps of the Connected Vehicle space to visually convey the goals, relationships and content of the organizations in this sector. Since the space is ever expanding with new projects commencing often, the deliverable is not just a static document, but a tool for the Client to track the expansion and progress of the sector.

The technology used to produce this deliverable is a product cloud computing-based platform called Mindomo, which produces interactive, multimedia-rich mind maps. These maps will enable the Client to click through the various branches of the Connected Vehicle universe and open web pages, videos, audio files, presentations and whitepapers. At the end of OmniAir's engagement, the Client will receive full access to the editing features of the application. This will allow the client to continually add/edit/delete the map's branches and the embedded content to reflect the real-time changes in the industry for as long as the Client wants to use the tool. This document is simply to transmit the readiness of the Task 1 deliverable, which is the content within the application. We suggest a webinar be conducted as soon as possible to walk through the application and demonstrate the functionality.

Notes:

1. Currently this structure is cloud-based with a license held by an OmniAir member organization. There are various ways we can structure access and content storage as we move forward.
2. The nature of this tool is that it is not a snapshot of the sector but an ongoing real-time account of what research is being conducted and what content is available. Because of this fact, the embedding and linking to content is an ongoing task and will be done by the OmniAir team throughout the engagement period. At the end of the engagement, a session will be held to train the client on how to use the application and maintain the content.

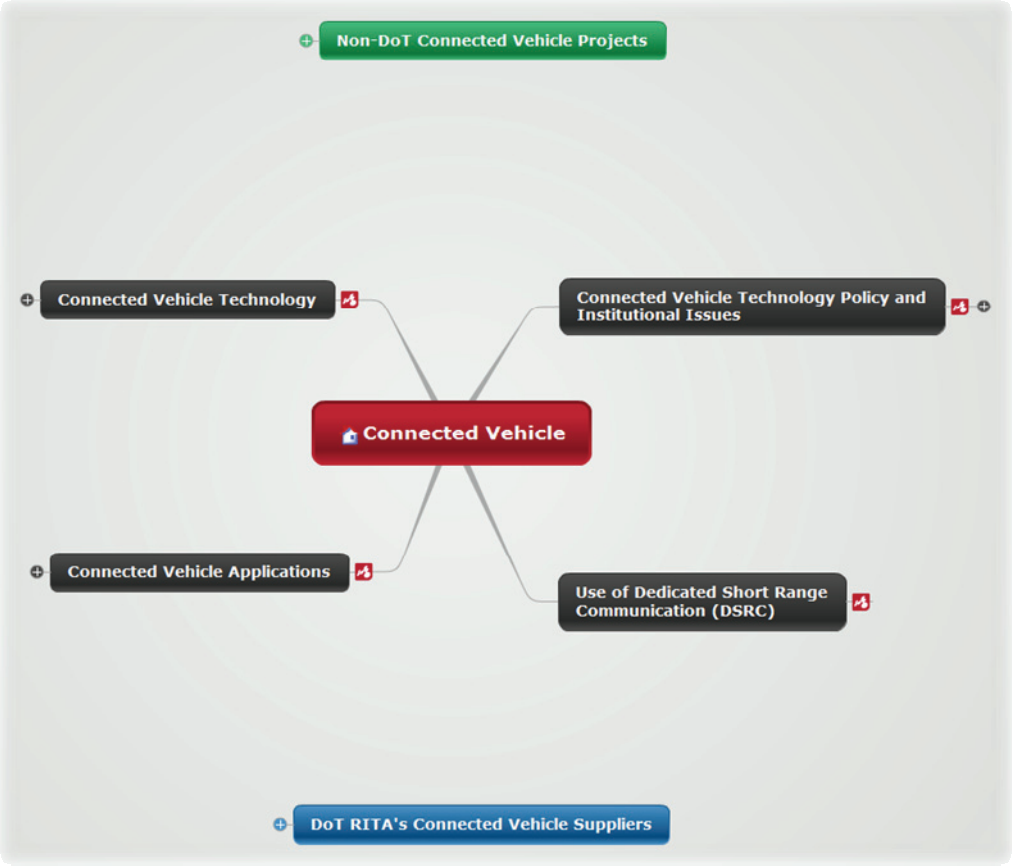


Connected Vehicle Content Map

Design Methodology

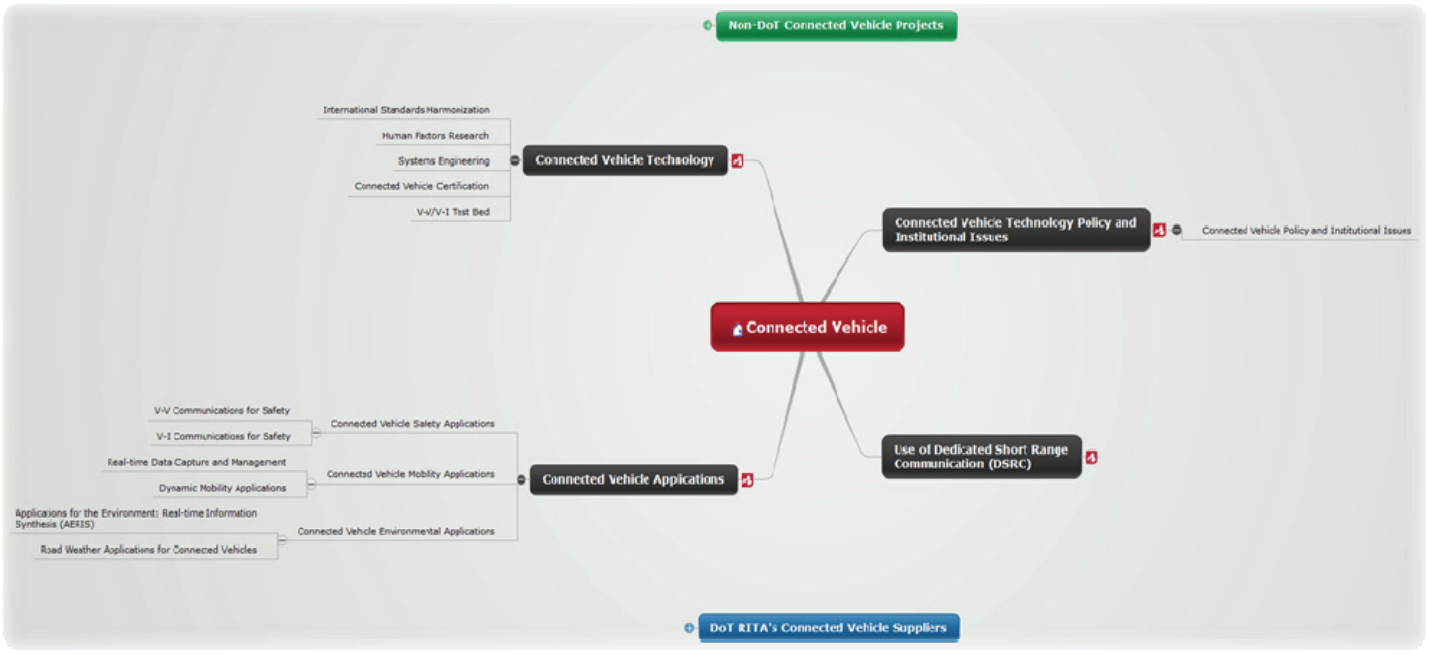
The three main branches of the map structure are the USDOT's Connected Vehicle focus areas, Non-DOT Connected Vehicle Projects, and USDOT/RITA's Connected Vehicle Suppliers. These multiple paths will allow the user to drill into content from various perspectives. For example, if someone wanted to see what work OmniAir is doing you can find it by either going to OmniAir as an organization under the Supplier path, or find the OmniAir documents under the Connected Vehicle Technology path. We used the USDOT's structure as the central path and point of reference for the other industry research that is being conducted.

Top Level or HOME

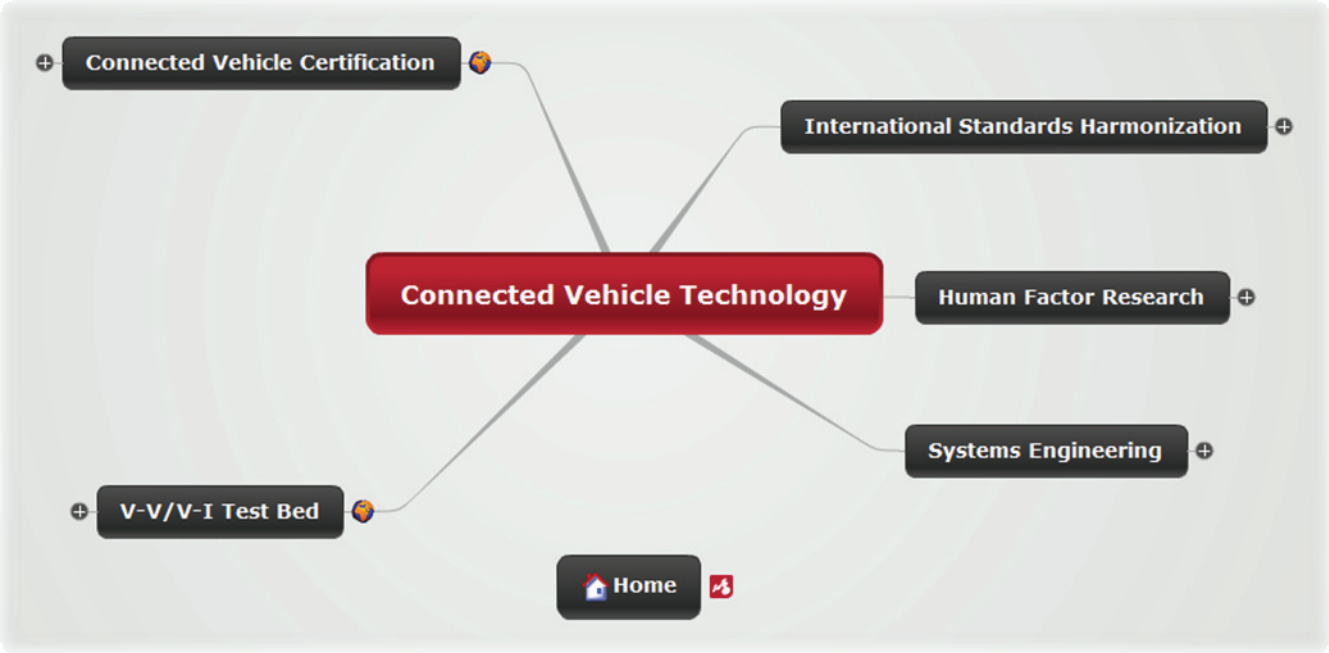


Following are several views of maps deeper in the structure.

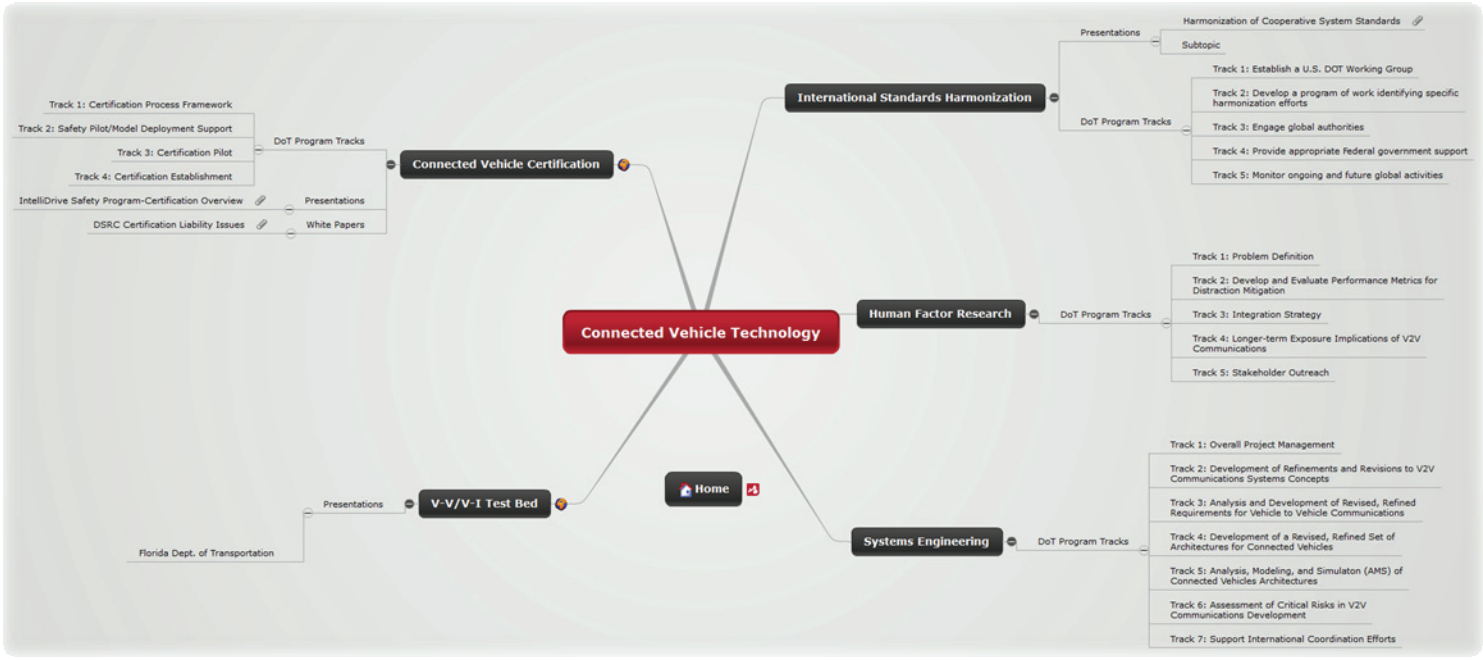
Home map with branches



Connected Vehicle Technology Map One level below Home map, accessed by clicking on "Connected Vehicle Technology" subtopic of Home map



Connected Vehicle Technology map with branches opened. Click back up to home map with Home button



Close up of Connected Vehicle Technology map level. Notice paper clip icon indicating attachment, globe icon for web link, and embedded YouTube video.

Functionality

The Mindomo application is developed to mirror Office 2007 applications with the tool ribbon on the top of the work space. Its primary function is the creation of mind maps, but with integration of content and interactivity functionality that is not present in other applications that we previewed.

Features and Functionality

- Intuitive user interface
- Mind map creation functionality on open canvas for unlimited subtopic branches
- Ability to embed multimedia tools such as
    - Web links (Http, Https, ftp, email)
    - Image
    - Video
    - Audio
    - Link to other maps and topics/subtopics
    - Ability to add notes, tasks, comments to topics/subtopics
    - Ability for online collaboration and screen share with other contributors with integrated chat function

As the engagement period continues, the OmniAir team will further develop the branch structure and embedded content. The client's input is eagerly welcomed as we move through the engagement as to how you would like the content structured and presented.

View of map creation/editing interface