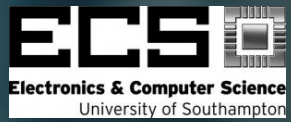
ICCRTS 2016 : 21st International Command and Control Research and Technology Symposium.
KNOWLEDGE SYSTEMS FOR COALITION OPERATIONS (KSCO)

MINDCOLLECT

Information Needs Management System for Coalition Situational Awareness, Sensemaking, Decision Making and Mission Integration



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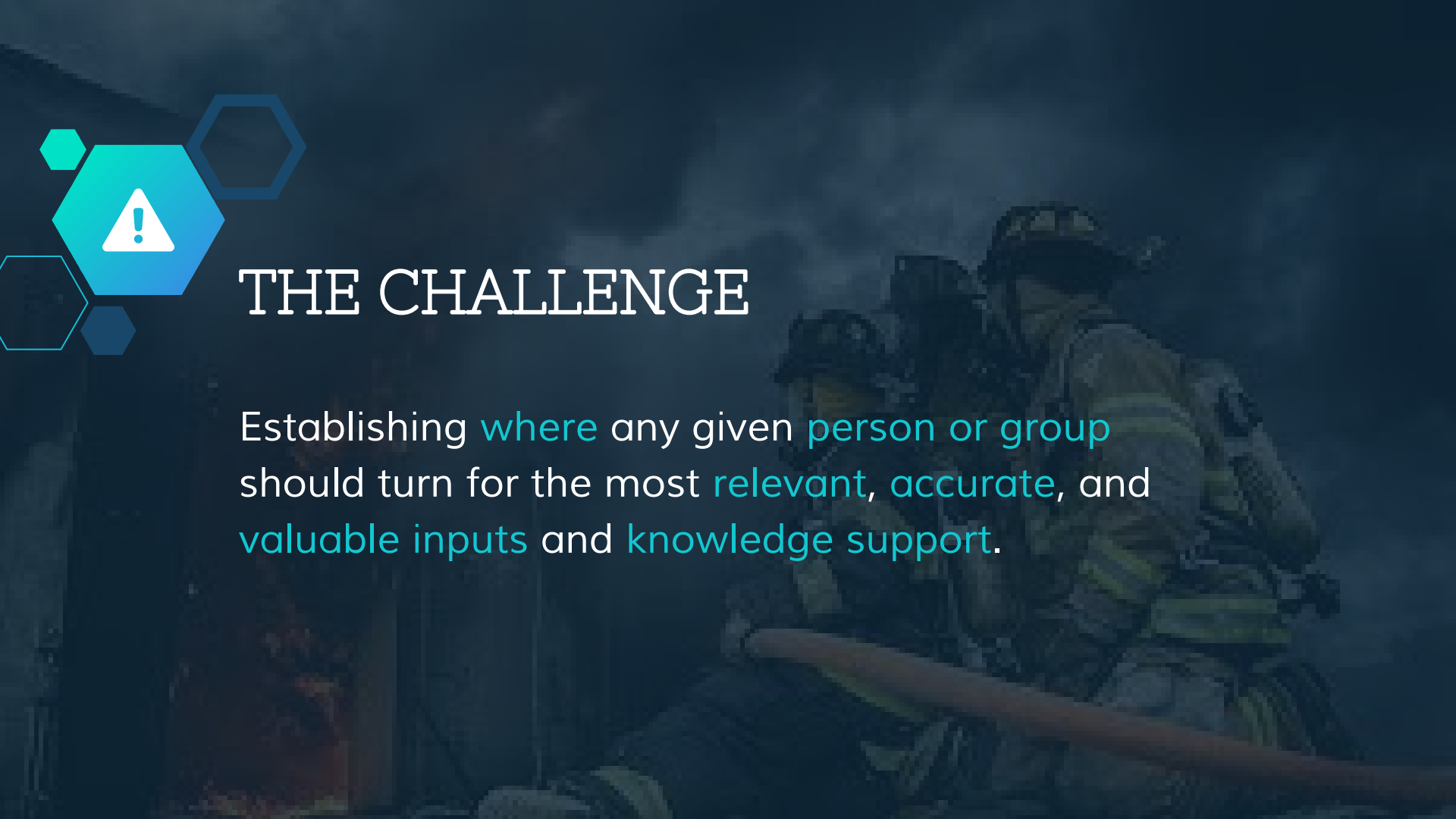


THE CHALLENGE

Establishing where any given person or group should turn for the most relevant, accurate, and valuable inputs and knowledge support.

Why Define Information Requirements & Map Information Flow?

Data-informed Decisions

Base business decisions on higher-quality information inputs and analysis

Faster Worker Productivity

Clear descriptions of information inputs to roles, decisions and tasks that accelerate time-to-competency

Collaborative Transformation

The process aligns managers, KM, IT, Functions and employees in the transformation process

Data collected can be used to create other artifacts

Inputs to
Process Maps

Job Previews, Job Onboarding
Guides and Learning Materials

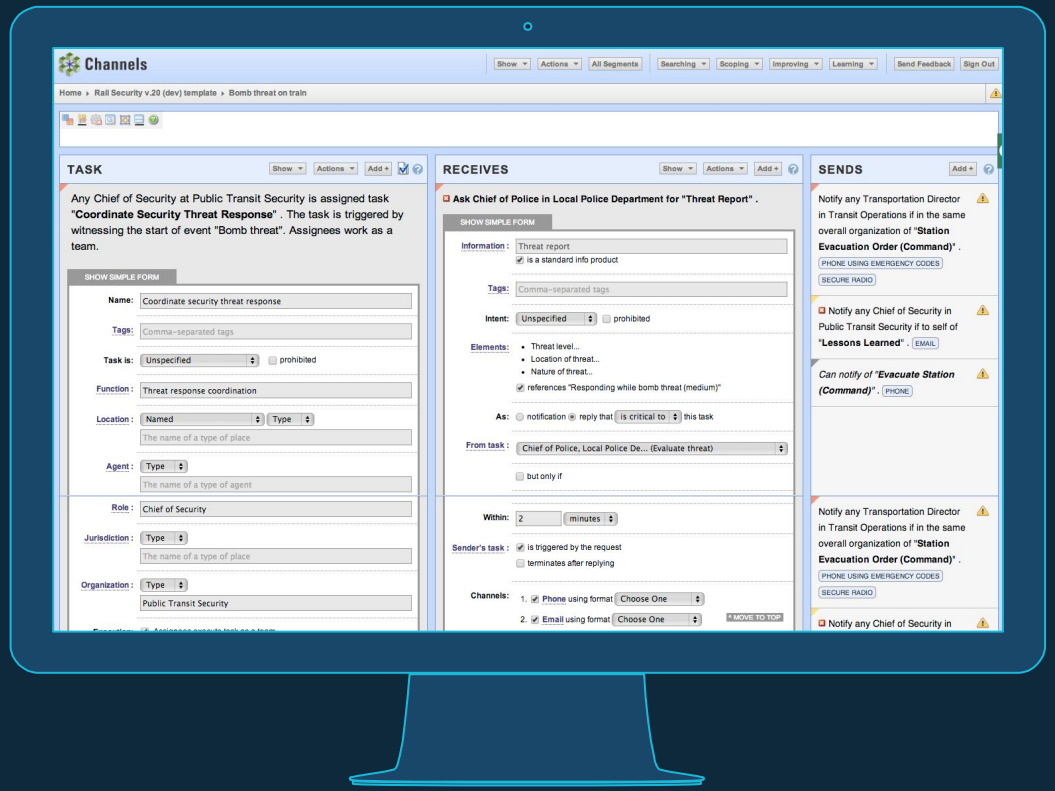
Specifications for Tasks
and Information Needs

Inputs to Emergency
Preparedness Plans

Profile Information Needs & Add Context

PAST WORK

ABOUT CHANNELS



INTRODUCING...

MINDCOLLECT

DESIGNED

to be easy for everyone

. . .

COMMANDERS

OPERATIONAL PARTNERS

NON-MILITARY PARTNERS

MINDCOLLECT CONSISTS OF...

THE METAMODEL

The software semantically interrelates the conceptual elements in the questions and answer datasets

Do you perform this task during Phase X, Phase Y, or Phase Z of the **PROCESS**?

Which **ROLE** in the above organization performs this task?

What **INFORMATION INPUTS** are needed to execute this task?

What is the **SOURCE ORGANIZATION** for this information?

By what **MEANS OF COMMUNICATION** is this information received?

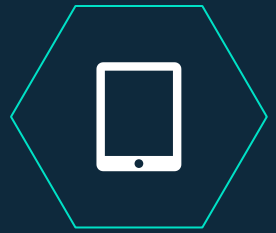
What **ISSUES** impact your ability to access or use this information?

What is the **SOURCE ROLE** for this information?

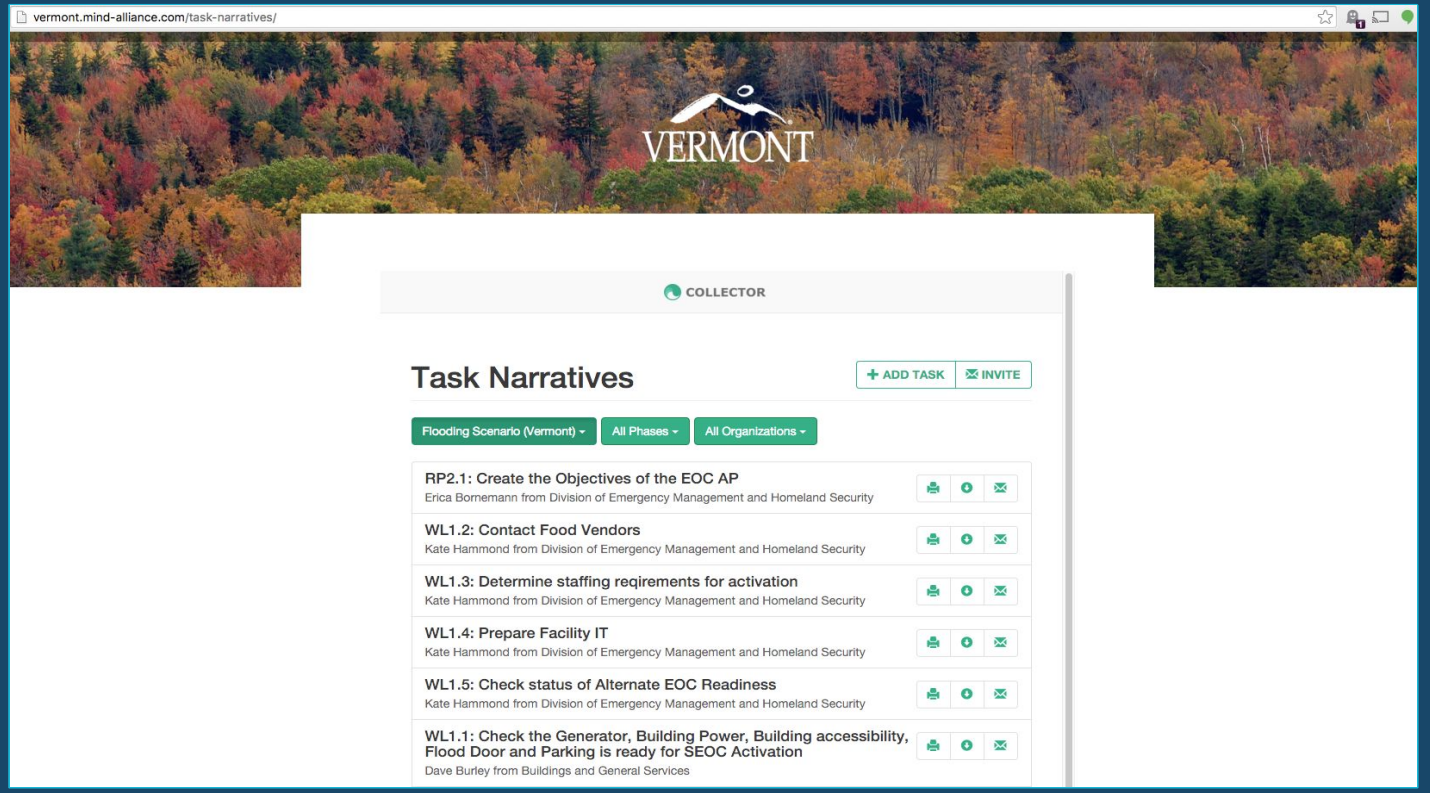
NATURAL LANGUAGE GENERATION

1. Machine representation system such as a knowledge base.
2. NLG systems dynamically create texts to meet a communicative goal.
3. Achieve situational awareness, sensemaking, decision making

MindCollect identifies information gap issues so that that manager can improve plans and track the effect of solutions that get deployed.



SOFTWARE DEMONSTRATION


vermont.mind-alliance.com/task-narratives/
VERMONT
COLLECTOR
Task Narratives
+ ADD TASK
INVITE
Flooding Scenario (Vermont)
All Phases
All Organizations
RP2.1: Create the Objectives of the EOC AP
Erica Bornemann from Division of Emergency Management and Homeland Security
WL1.2: Contact Food Vendors
Kate Hammond from Division of Emergency Management and Homeland Security
WL1.3: Determine staffing reqirements for activation
Kate Hammond from Division of Emergency Management and Homeland Security
WL1.4: Prepare Facility IT
Kate Hammond from Division of Emergency Management and Homeland Security
WL1.5: Check status of Alternate EOC Readiness
Kate Hammond from Division of Emergency Management and Homeland Security
WL1.1: Check the Generator, Building Power, Building accessibility, Flood Door and Parking is ready for SEOC Activation
Dave Burley from Buildings and General Services

Vermont Case

45 PARTICIPANTS

SEOC, SSF, LOCALS, CONSULTANTS

81 PROCESSES

IDENTIFIED FOR VERMONT SEOC

96% ACHIEVED

LEARNING OBJECTIVES & TASKS

148 TASKS

DEFINED FOR VERMONT SEOC

BENEFITS

Deeper Understanding of Information Needs

Save Planning Time

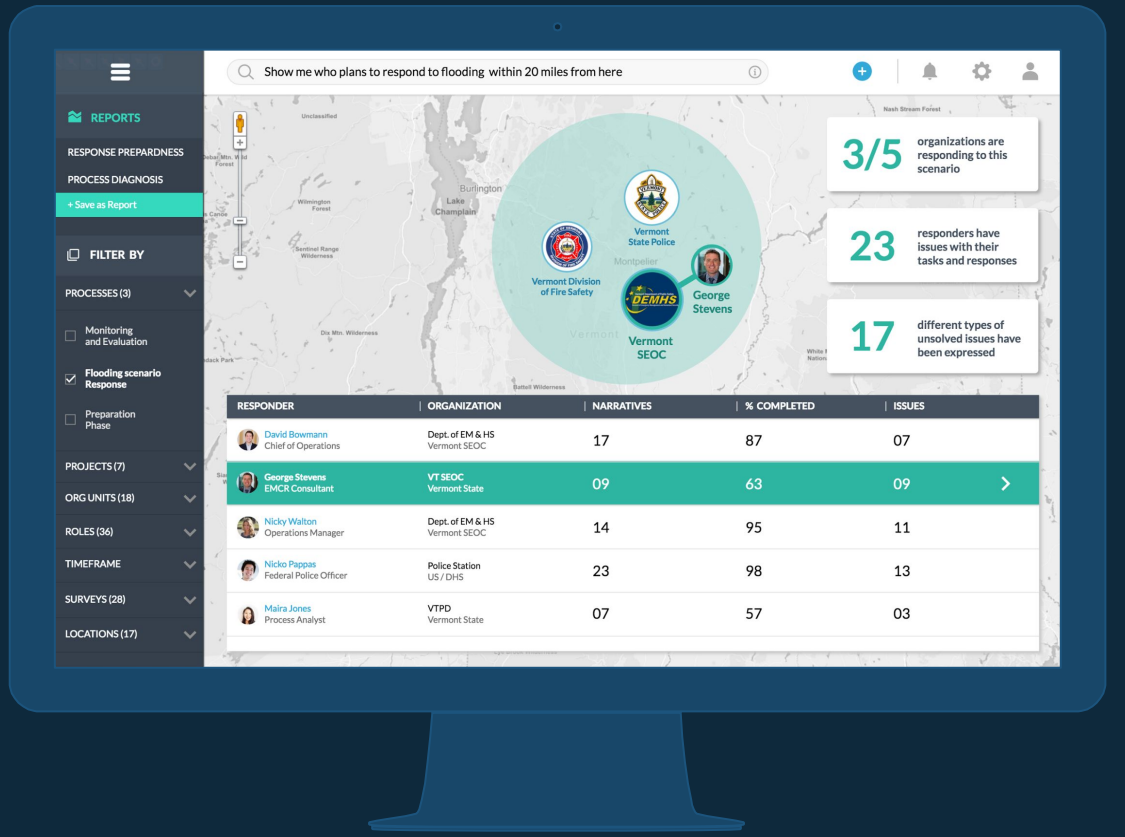
Retain and Leverage Institutional Knowledge

Improve Crisis Response and Performance

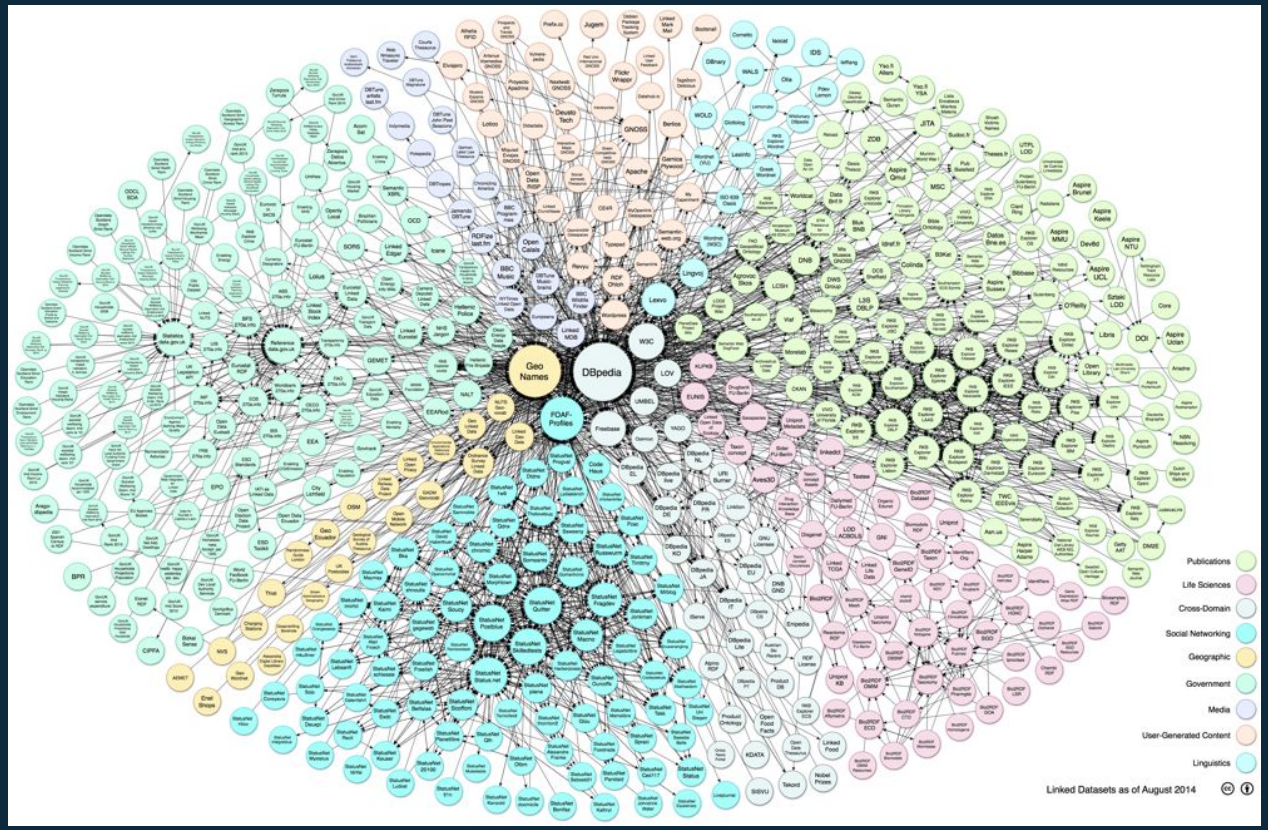
Increase Plan Effectiveness

Enhance Decision Quality

FUTURE DIRECTIONS

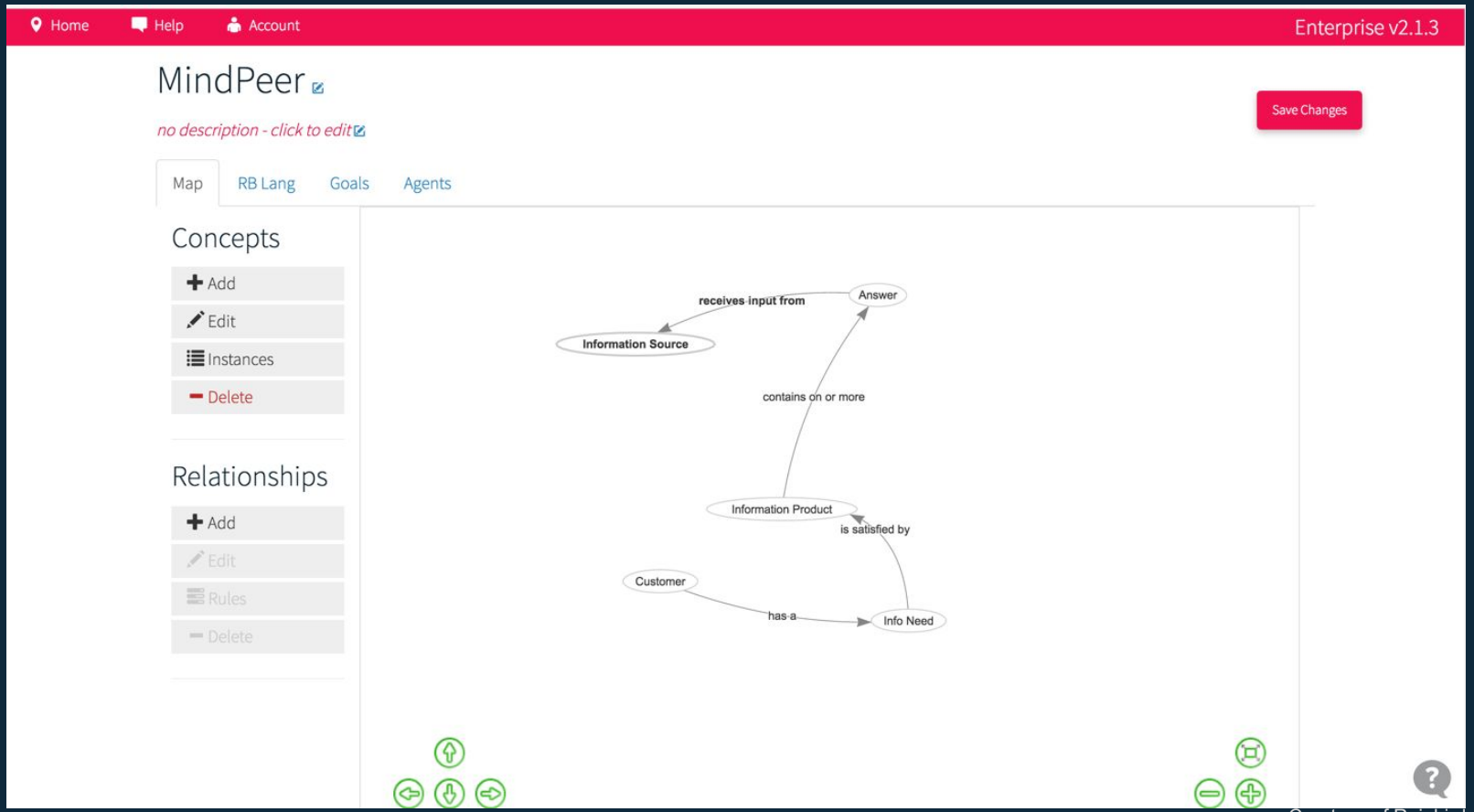


The Linking Open Data Cloud Diagram



http://lod-cloud.net/

Semantic Knowledge Map



Courtesy of Rainbird

MIND ALLIANCE
SMARTER HUMAN NETWORKS

MINDPEER

Questions

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