

*Support for agile planning &
execution of coordinated actions*

Collaborative Technologies for Network-Centric
Operations



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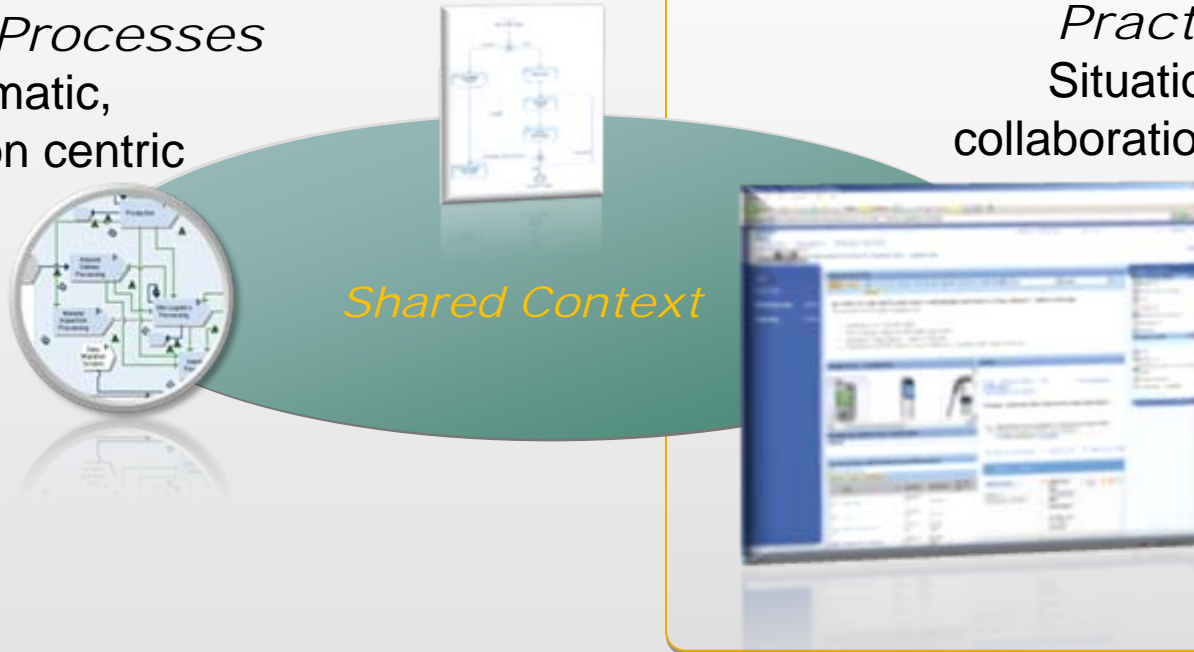
Composite Process

Adhoc, agile,
people centric

Backbone Processes

Systematic,
automation centric

Practice
Situational,
collaboration centric



fully pre-defined

not pre-defined



- **Lack of Transparency**
- **No structured storage and retrieval of process knowledge**
- **lack of exchange of process knowledge**
- **disjunction between best-practices and running processes**
- **inability to trace evolving best-practices**

Collaborative Task Manager – an email-integrated task management tool



- It follows a human-centric approach:
 - It allows end-users to model and reuse unstructured, knowledge-intensive, collaborative processes.
- CTM enables end-users with as well as without IT expertise to compose all tasks needed to perform a certain process and to monitor these tasks.

Bottom Line:

- CTM facilitates reuse as well of personal as of organizational knowledge about recurring tasks as described in Military Orders / Military Training Manuals, e.g STXs.
- CTM allows exchange of task-related knowledge that can be stored in a personal folder structure or on a central server.
- CTM makes unstructured, collaborative tasks transparent.



New Task Create Subtask Cancel Task Send Request Process Info

Apply Pattern Save Pattern Task Patterns Explorer/Editor Evolution Explorer

Tasks

My Tasks

- Aufgaben
- CTM Tasks
- CTM Aufgabe

Current View

- CTM Tasks View
- Simple List
- Detailed List
- Active Tasks
- Next Seven Days
- Overdue Tasks

Mail

Look for: Search In: **CTM Tasks** Find Now Clear Options X

CTM Tasks

ctmTaskLevel Due Date % Co... ctmStatusField

Click here to add a new Task

AL: 63-2-4804 Perform Predeployment Supply Activities [2009-01-12_13:03:56_+01:00...

			Task Description	Due Date	% Complete	Status
			• 63-2-4804 Perform Predeployment Supply	None	0%	Not Started
			└• 1. Commander directs predeployment...	None	0%	Not Started
			└└• a. Identify supply requirements	None	100%	Completed
			└• b. Coordinate additional supplies	Tue 1/6/2009	0%	Not Started
			└• c. Coordinate float and/or replace...	Wed 1/7/2009	0%	Not Started
			└• 2. Unit elements perform predeplym...	None	0%	Not Started
			└• a. Identify shortages of supplies a...	None	75%	In Progress
			└• b. Inventory soldier's personal bel...	None	0%	Waiting for ...
			└• c. Secure personal belongings rem...	None	0%	Not Started

Tasks at all hierarchy levels can be delegated to other people.

If a task is delegated, The addressed delegates receive a request that can be

- Accepted

- Declined

or

- **Negotiated (this is what you currently can't do !!!)**

Accept, Decline, Negotiate ...



The screenshot shows the Microsoft Outlook interface. The main window displays an email titled "STX C-1 Deploy-Unit / CTM Request" from "Stoitsev, Todor" received on Monday, 1/12/2009. The email content includes a header for "SAP RESEARCH" and "EUDISMES" with the subject "COLLABORATIVE TASK MANAGER". Below this, a "Request" section indicates a "Due date: 2008-12-01". The main body of the email is titled "TASK DESCRIPTION" and contains the following text:

Dear MAJ Peukert,

As part of the preparation for operation Mustang please train our unit in accordance with the attached FTX.

Specifically you need to conduct "Deployment" training in a desert environment.
Access classified information via cFolders.

The Outlook interface also shows a folder list on the left, including "Posteingang", "Ungelesene Nachrichten", and "Postfach - Zimmer". The status bar at the bottom indicates "15 Items" and "All folders are up to date." The status bar also shows "Connected" with a network icon.

- Creation of tasks and task delegations out of the office application is tracked on a backend system.
- All parties involved in such a collaborative process can retrieve an end-to-end process overview at any time, covering information about complete set of actors and their task, assignments, and complete set of tasks, their interrelations, content, and execution status (subject to authorization constraints).

The screenshot displays the SAP Research Collaborative Task Manager interface. The main window shows a task dependency diagram with the following tasks:

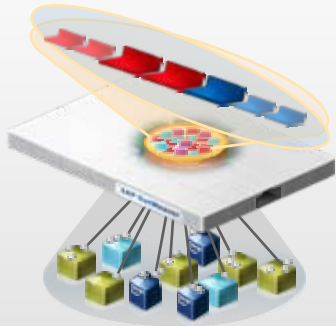
- Training of 344 Heavy Transport ...** (0%): Not started, Due date: 2009-February-22, Description: besic gktion, Task ID: [i]
- FTX C-6. Relocate Heavy Manoe...** (0%): Not started, Due date: 2009-February-22, Description: besic gktion, Task ID: [i]
- STXC-2 RELOCATE UNIT** (100%): Completed, Due date: 2009-February-22, Description: besic gktion, Task ID: [i]
- STXC-3 ESTABLISH AREA** (30%): In progress, Due date: 2009-February-22, Description: besic gktion, Task ID: [i]
- STXC-1 DEPLOY UNIT** (0%): Waiting for someone else, Due date: 2009-February-22, Description: besic gktion, Task ID: [i]
- STXC-4 PROVIDE MDTOR TRA...** (10%): In progress, Due date: 2009-February-22, Description: besic gktion, Task ID: [i]
- STXC-5 DEPLOY UNIT** (0%): Not started, Due date: 2009-February-22, Description: besic gktion, Task ID: [i]
- STXC-6-1 DEPLOY UNIT** (0%): Not started, Due date: 2009-February-22, Description: besic gktion, Task ID: [i]

The diagram shows dependencies: Training of 344 Heavy Transport ... and FTX C-6. Relocate Heavy Manoe... are prerequisites for STXC-2 RELOCATE UNIT, STXC-3 ESTABLISH AREA, STXC-1 DEPLOY UNIT, and STXC-4 PROVIDE MDTOR TRA... STXC-2 RELOCATE UNIT is a prerequisite for STXC-3 ESTABLISH AREA, STXC-1 DEPLOY UNIT, and STXC-4 PROVIDE MDTOR TRA... STXC-3 ESTABLISH AREA is a prerequisite for STXC-1 DEPLOY UNIT and STXC-4 PROVIDE MDTOR TRA... STXC-1 DEPLOY UNIT is a prerequisite for STXC-4 PROVIDE MDTOR TRA... STXC-4 PROVIDE MDTOR TRA... is a prerequisite for STXC-5 DEPLOY UNIT and STXC-6-1 DEPLOY UNIT. STXC-5 DEPLOY UNIT is a prerequisite for STXC-6-1 DEPLOY UNIT.

The **JNet Navigation** window shows a hierarchical tree structure of tasks. The status bar at the bottom indicates: **Nodes 33 Links 37 Size 2645x1704**. The system tray shows **Local intranet**.

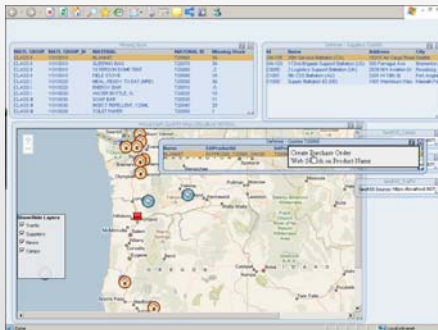
- In contrast to workflow systems, the CTM approach always offers the possibility ad-hoc deviations
- CTM leaves the responsibility for ad-hoc deviations by the acting people.
- Due to the tracking functionality, previous ad-hoc processes can be analyzed on the backend system for guidance in a current process to discover best practices

Collaborative Taskmanager



- Act on immediate, unpredictable business events supporting individuals or communities
- Are rapidly created by end-users through task pattern capabilities
- Bridge structured processes and collaborative activities
- Can be captured and used as best-practices

Use Case



A Col is tasked to perform a Unit training via Email. Such scenarios are specified for example in US Army mission training plans. These plans describe field training exercises , e.g. the relocation of heavy maneuver forces on the battlefield

All the tasks of the US Army Mission Training plans are incorporated in the CTM. By using the CTM unit training is planned in a collaborative, transparent matter.

Support for agile planning & execution of coordinated actions



Address the informational needs of decision makers



Task Pattern Retrieval



Process Transparency, Agility & Process Discovery



Decision makers can interact with the system in a non-technical way



Collaborative Task Manager

Thank you!