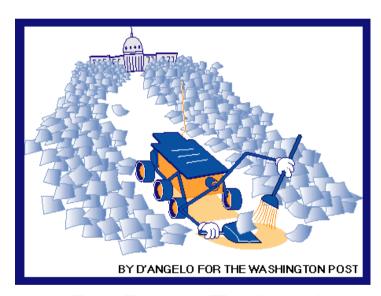
NASA Earth Sciences Technology Office (ESTO) Technologies Management Using Process Libraries and Electronic Handbooks

(Where Shakespeare Meets Freud)



Demonstration



Dr. Barry E. Jacobs barry.e.jacobs@comcast.net

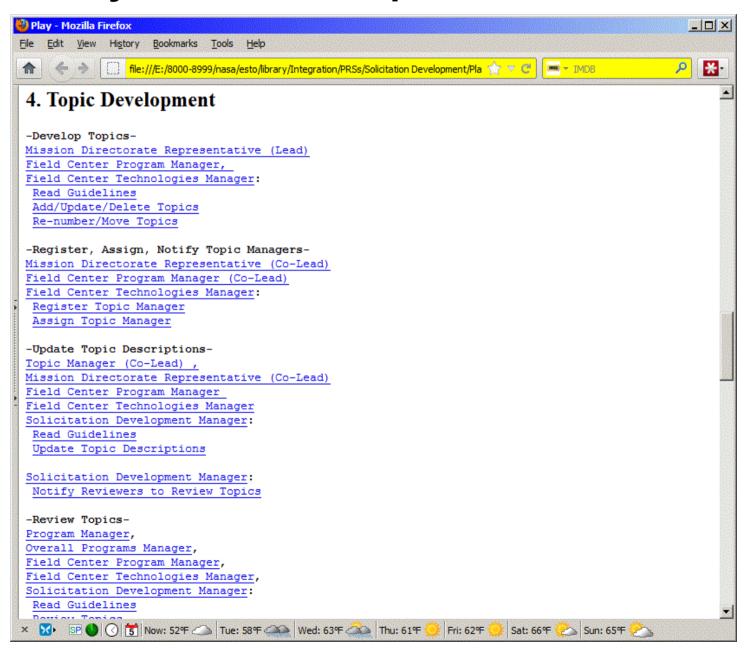
The Bottom Line:

We believe that to truly understand one's universe, one must see it thru multiple "eyes" and also have tools to "communicate" these views.

To do this, we propose editable and cost-saving process documentation "plays" for process developers and participants to help them quickly and effectively learn, integrate, test, teach, and work together.

These "plays" may be added to new or existing systems.

Plays describe subprocess execution.

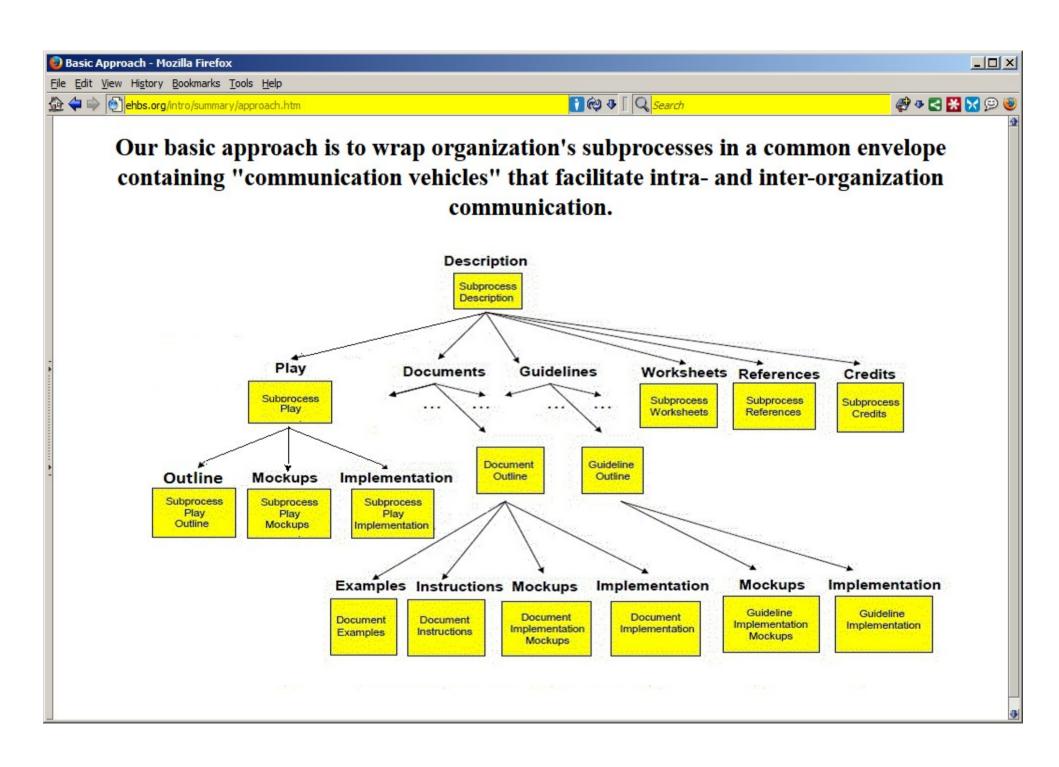


Benefits:

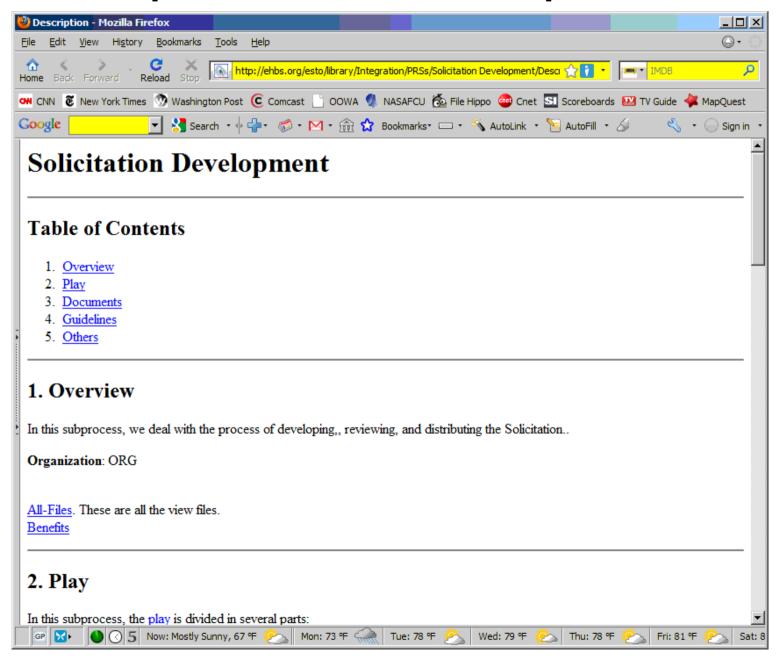
- Facilitates the collection of system and organizational requirements,
- Does not anger/upset people whose opinions are heard,

and

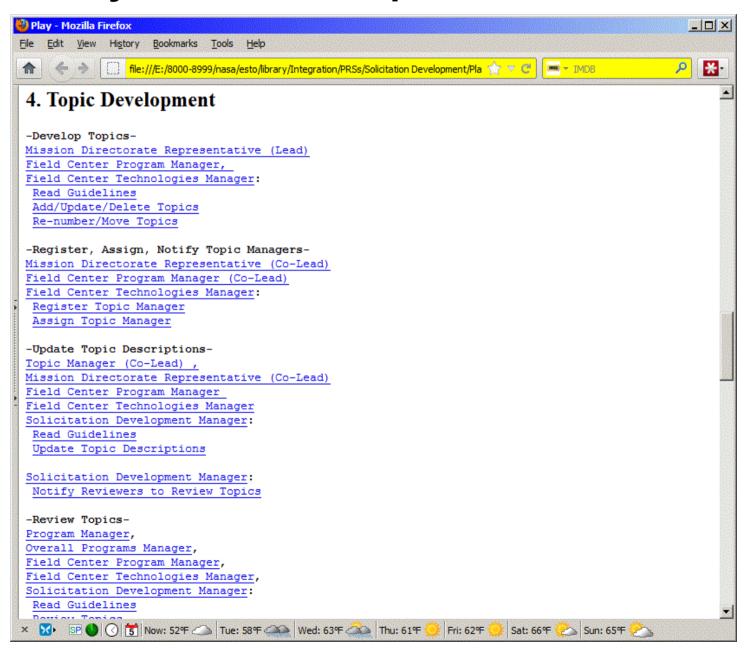
- Increases the interaction between managers, process developers, and participants.



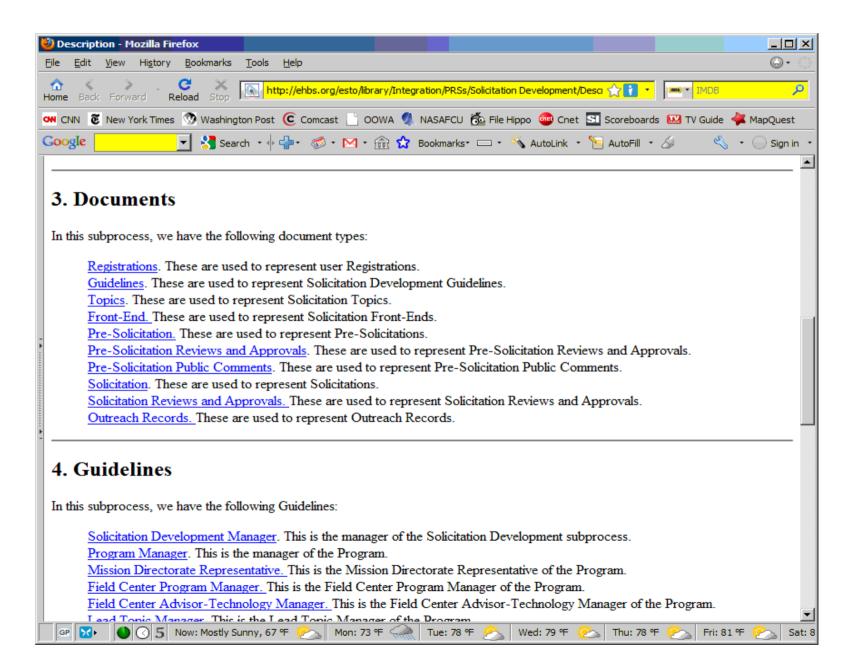
Descriptions summarize subprocesses.



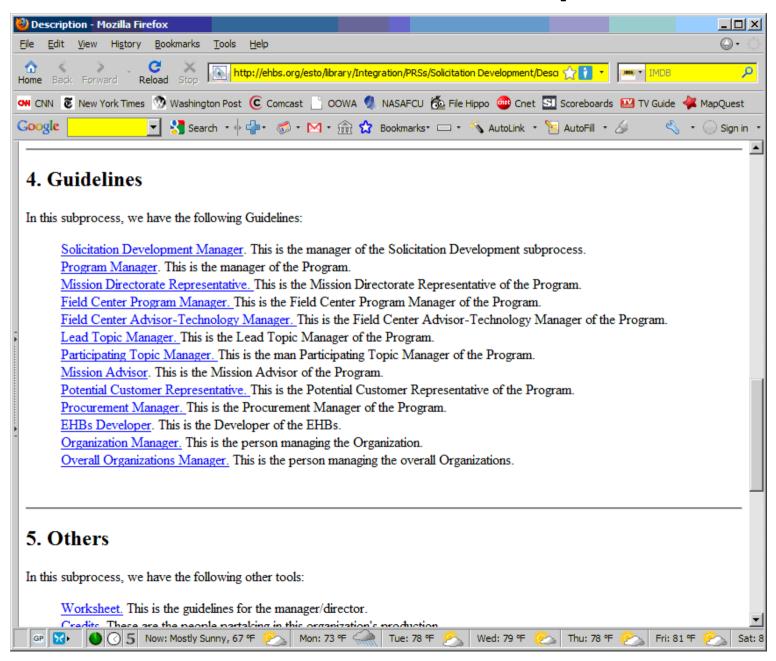
Plays describe subprocess execution.



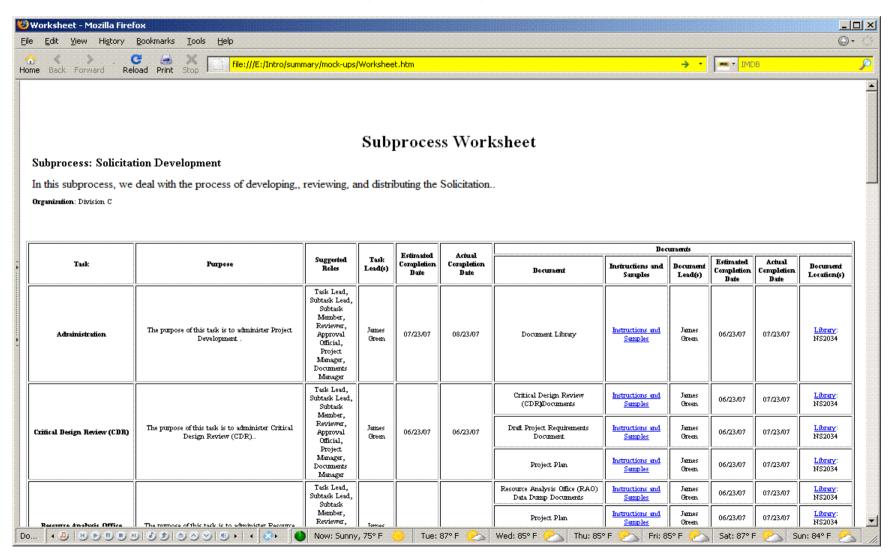
Documents describe subprocess data.



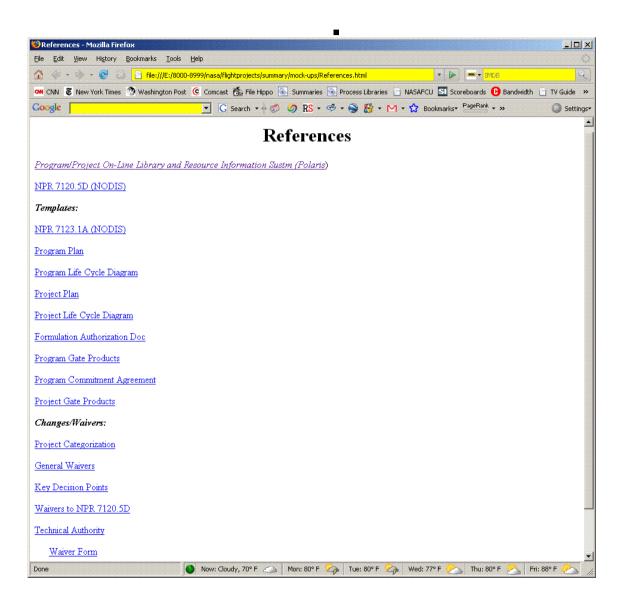
Guidelines describe user subprocesses.



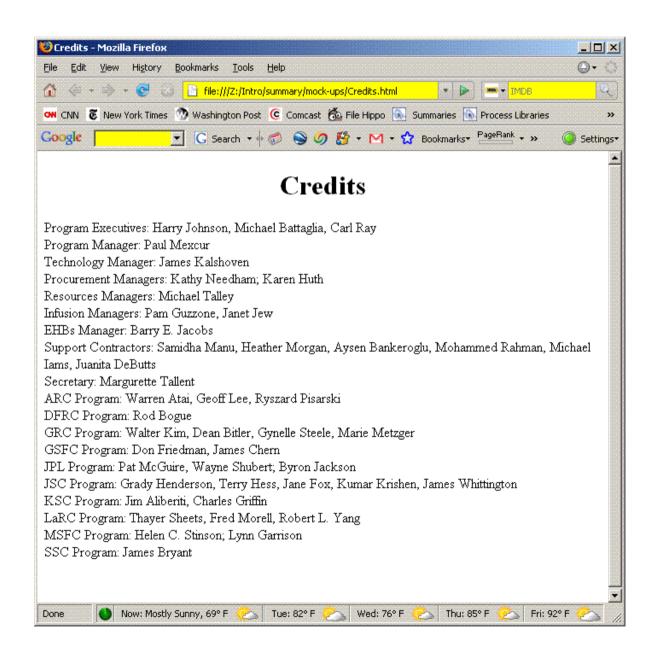
Subprocess Worksheets facilitate subprocess manager communication with process developers and participants.



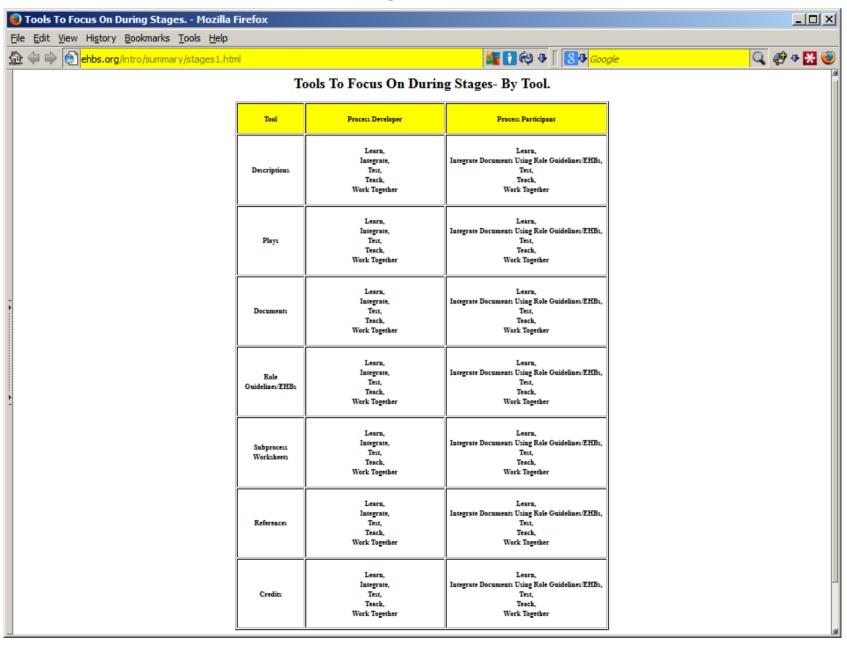
References list other related resources.



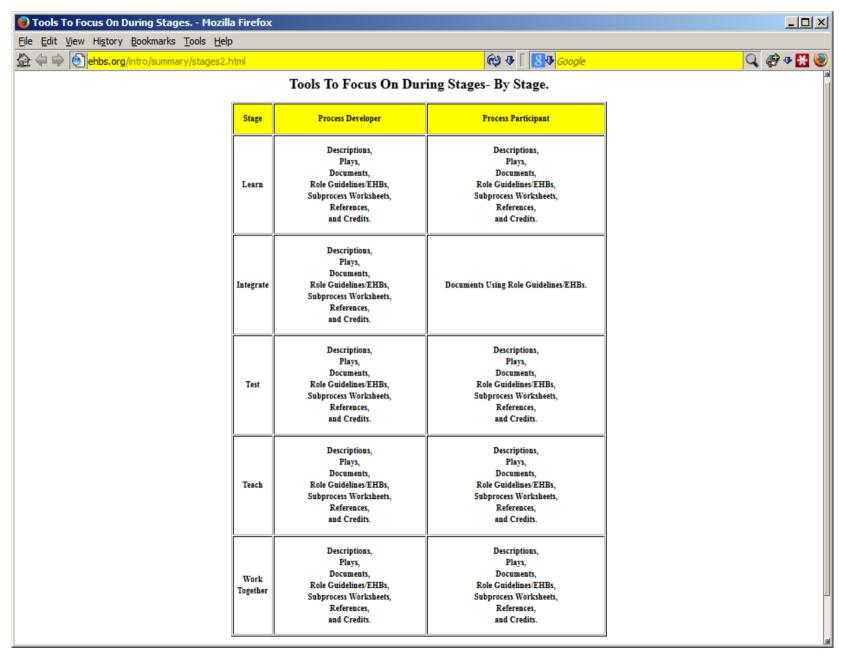
Credits acknowledge people's contributions.

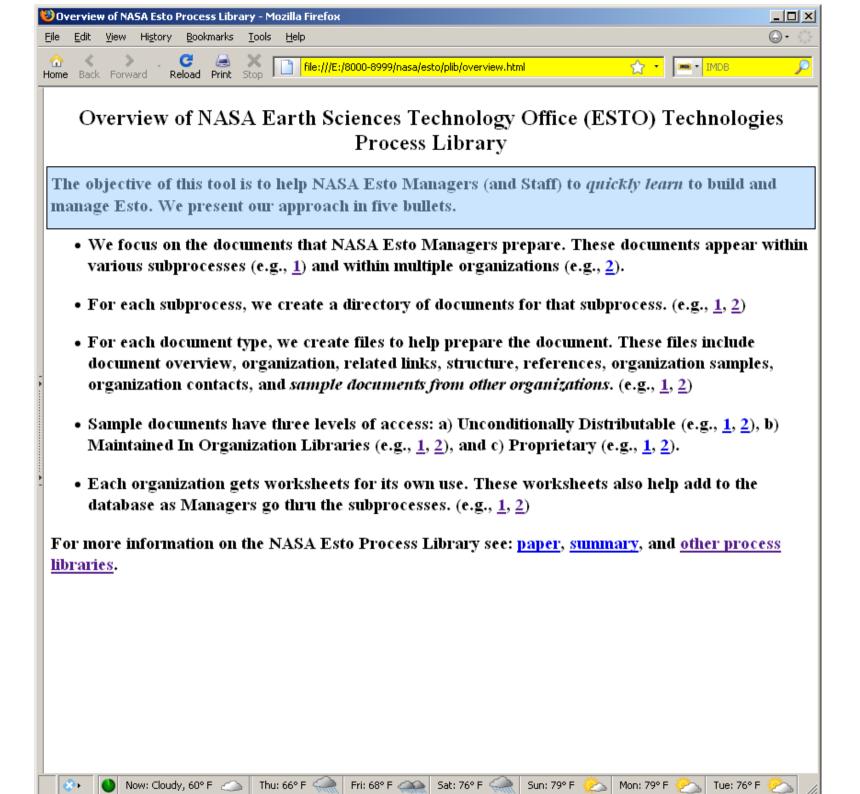


Tools that can be focused on during stagesby tool.



Tools that can be focused on during stagesby stage.





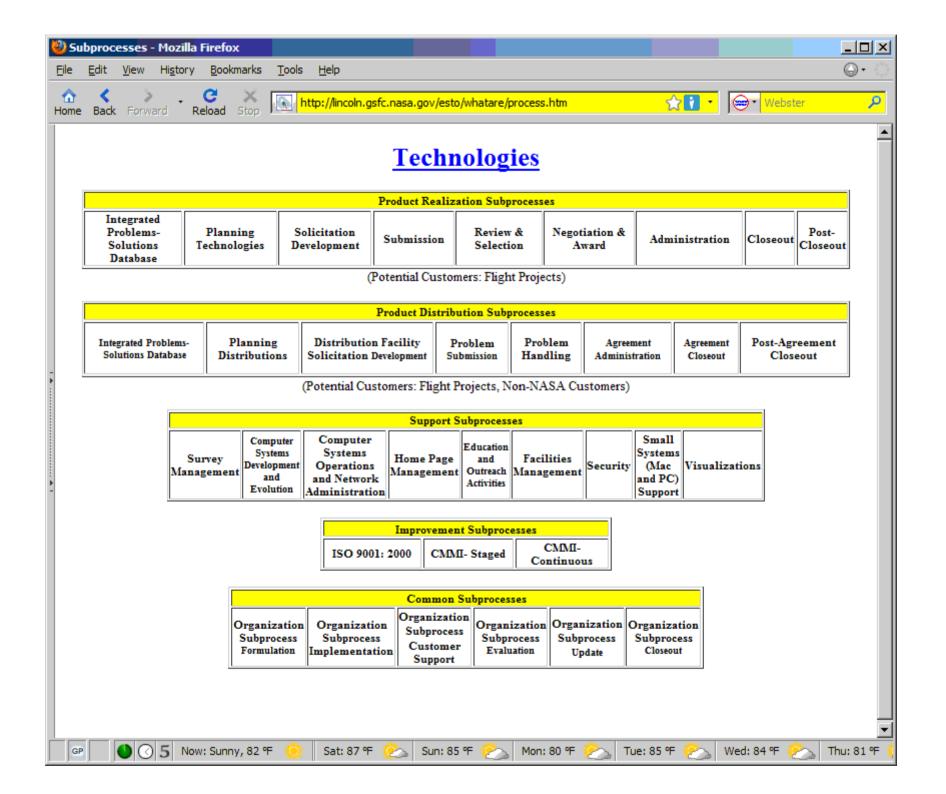


Overview of NASA Earth Sciences Technology Office (ESTO) Technologies **Process Library**

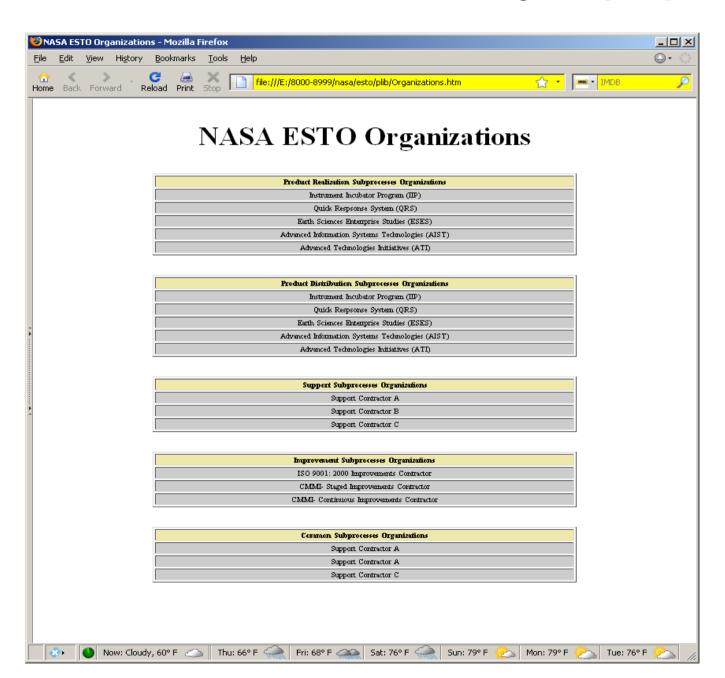
The objective of this tool is to help NASA Esto Managers (and Staff) to quickly learn to build and manage Esto. We present our approach in five bullets.

- We focus on the documents that NASA Esto Managers prepare. These documents appear within various subprocesses (e.g., 1) and within multiple organizations (e.g., 2).
- For each subprocess, we create a directory of documents for that subprocess. (e.g., 1, 2)
- For each document type, we create files to help prepare the document. These files include document overview, organization, related links, structure, references, organization samples, organization contacts, and sample documents from other organizations. (e.g., 1, 2)
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For more information on the NASA Esto Process Library see: paper, summary, and other process libraries.



Organizations provide different views of the subprocesses, some of which may be proprietary.



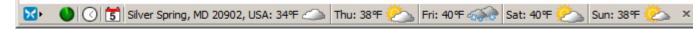


- 3) staging (mockups),
- 4) dress rehearsal (implementations),
- 5) performance (implementations),
- 6) evaluations (implementations),
- 7) revisions (outlines, mockups, implementations), and
- 8) closing.



Subprocess Documentor's View

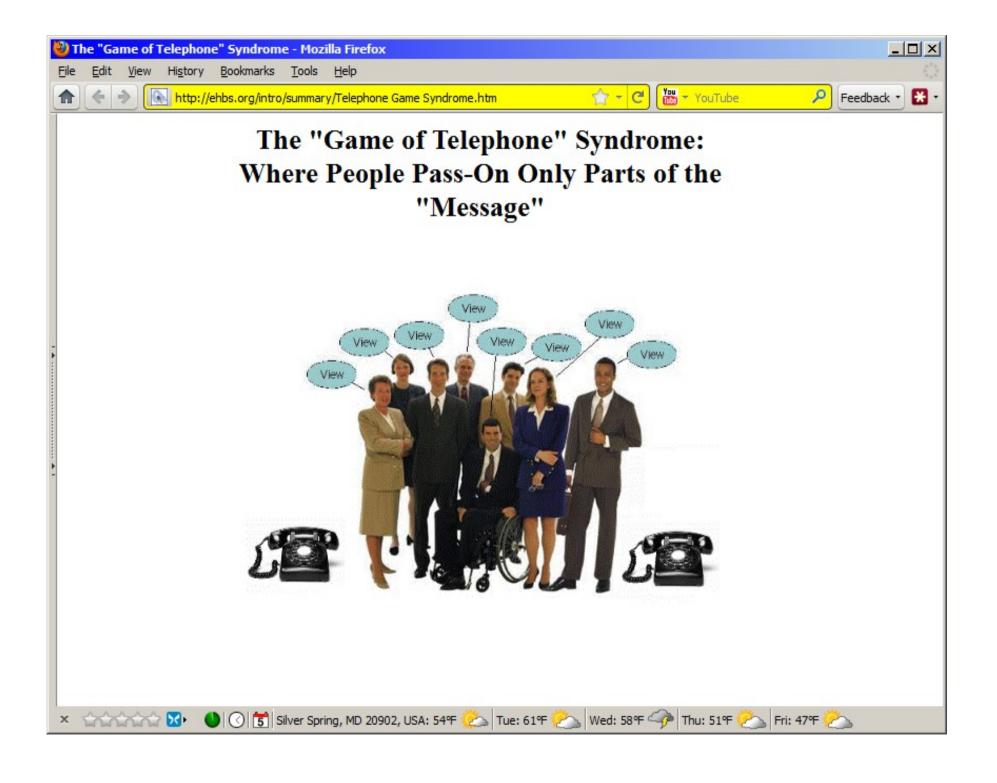




Organizations generate Subprocess Life-Cycle* Views

- Organization subprocess teachers want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)
- Organization subprocess documentors want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)
- Organization subprocess managers want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)
- Organization subprocess implementors want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)
- Organization subprocess participants want to quickly learn, integrate, and perform tasks that are part of their views. (Critical)
- Organization subprocess managers want to quickly monitor execution of tasks that are part of their views.
- Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly improve, test, and teach their subprocesses.
- Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly improve, test, and teach
 using other organization's views.
- Organization subprocess teachers, documentors, managers, implementors, and participants become hurt/angry when their views are not supported.
- Organization subprocess implementors want to quickly update, test, and teach tools that help facilitate execution of their subprocesses.
- Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly leave when their views
 continue not to be supported.

^{*} Also, called the "Universal Subprocess".



Overview of how editable and cost-saving process documentation tools can solve problems.

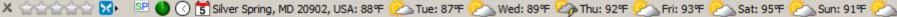
Problem	Solution
Develop Internet-based tools to support the paperless documentation and management of complex distributed processes.	Editable process documentation tools can be tailored to each subprocess.
Organizations provide different views of the subprocesses.	Editable process documentation tools can be tailored to reflect different organization's views of the subprocess.
Organizations execute the eight "play development" stages.	Editable process documentation tools can be tailored to reflect the eight "play development" stages.
People in organizations provide different views of the subprocesses.	Editable process documentation tools can be tailored to communicate different people's views of the subprocess.
Organizations generate Subprocess Life-Cycle Views.	Editable process documentation tools can be tailored to reflect different Life-Cycle views of the subprocess.
The "Game of Telephone" Syndrome: Where People Pass-On Only Parts of the "Message".	Editable process documentation tools can be tailored to layer below different people's views of the subprocess.



























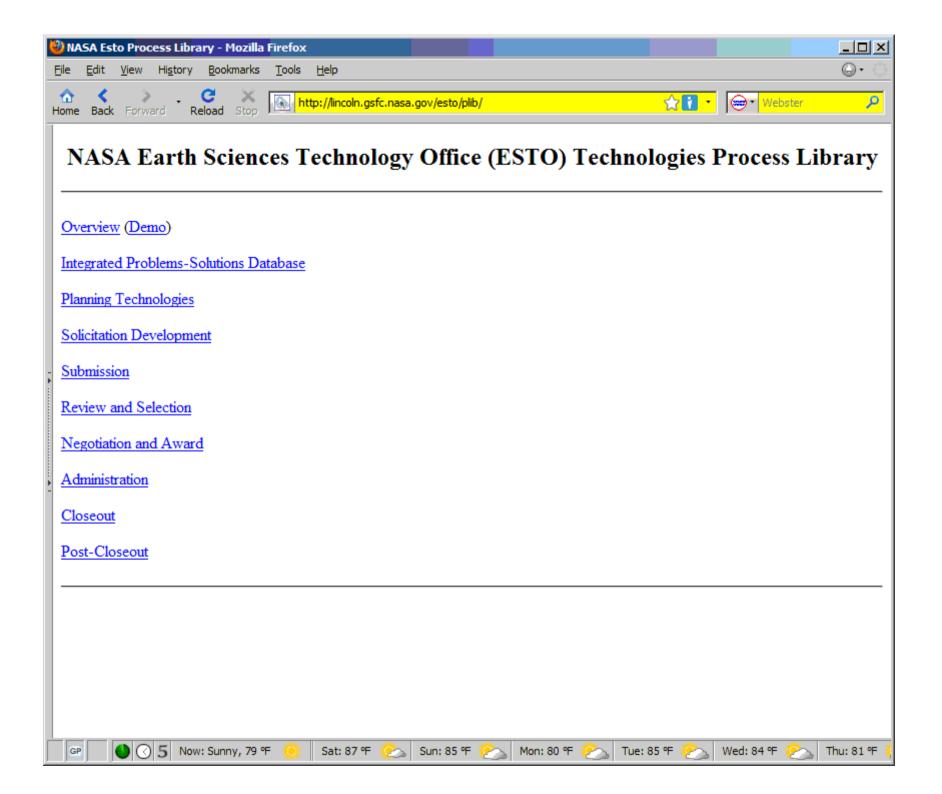


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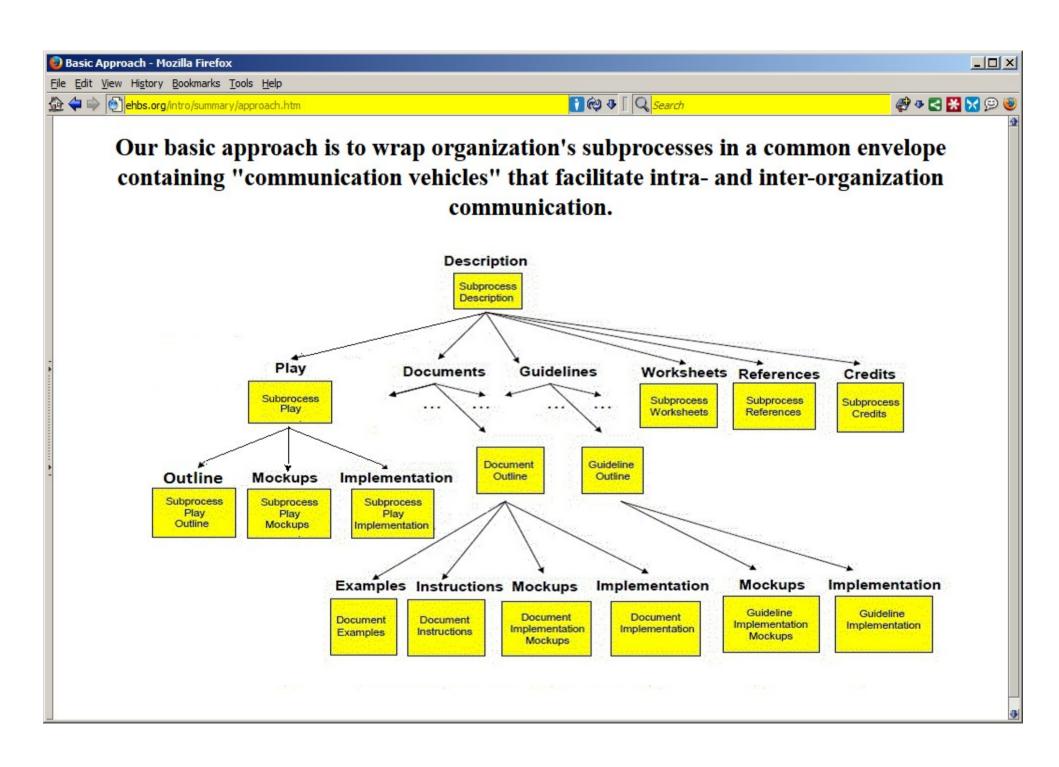
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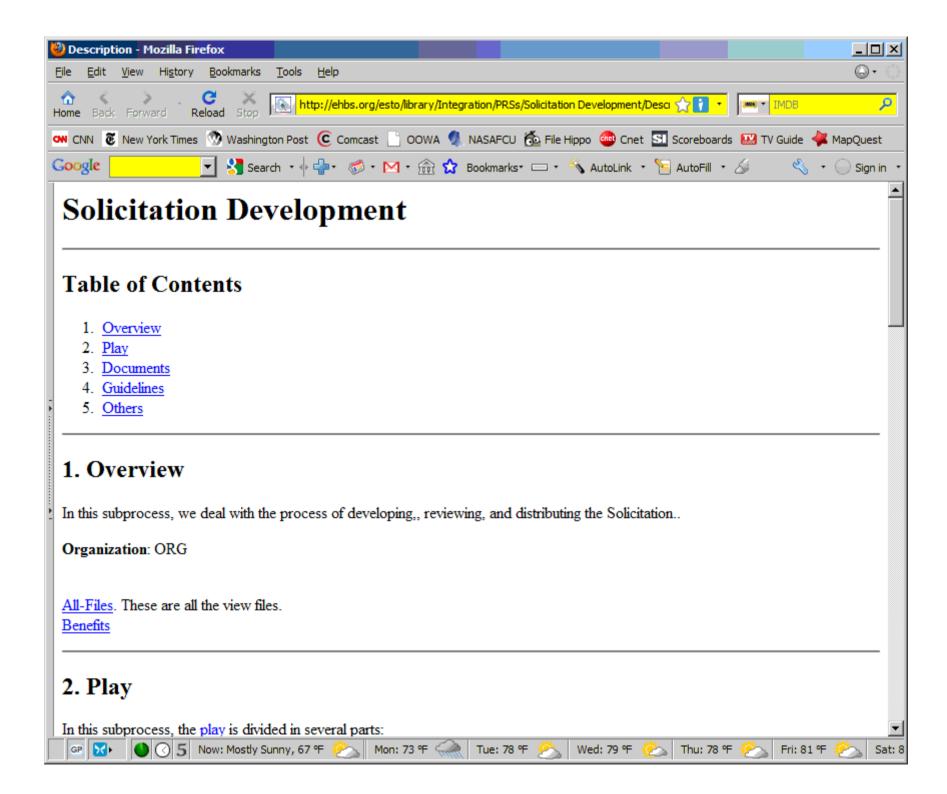
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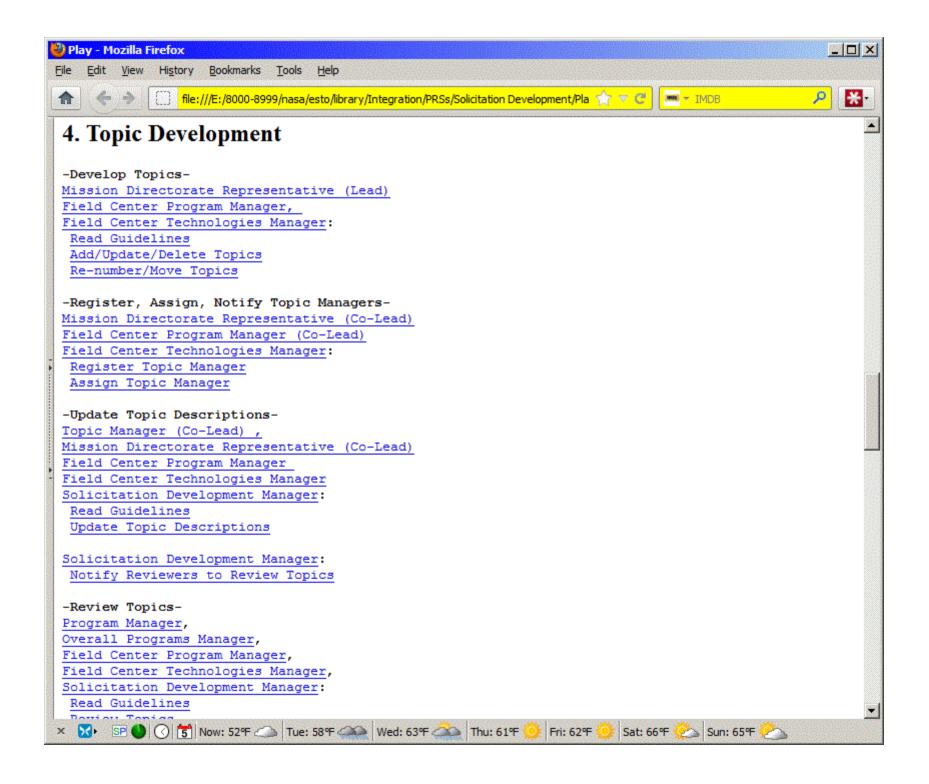
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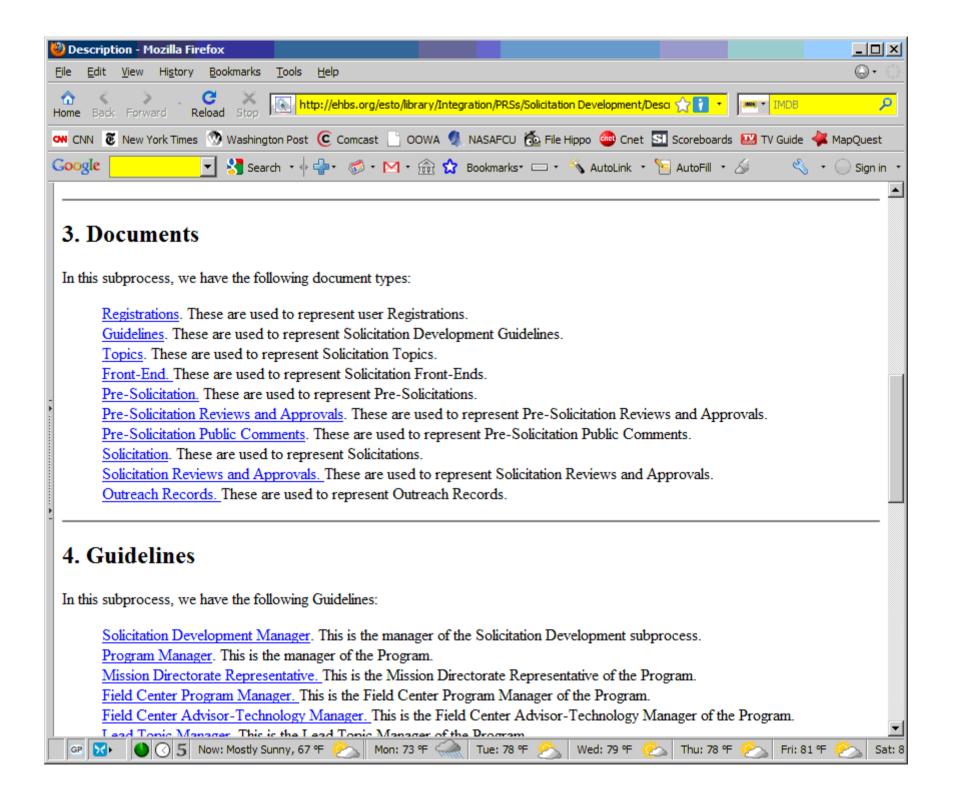


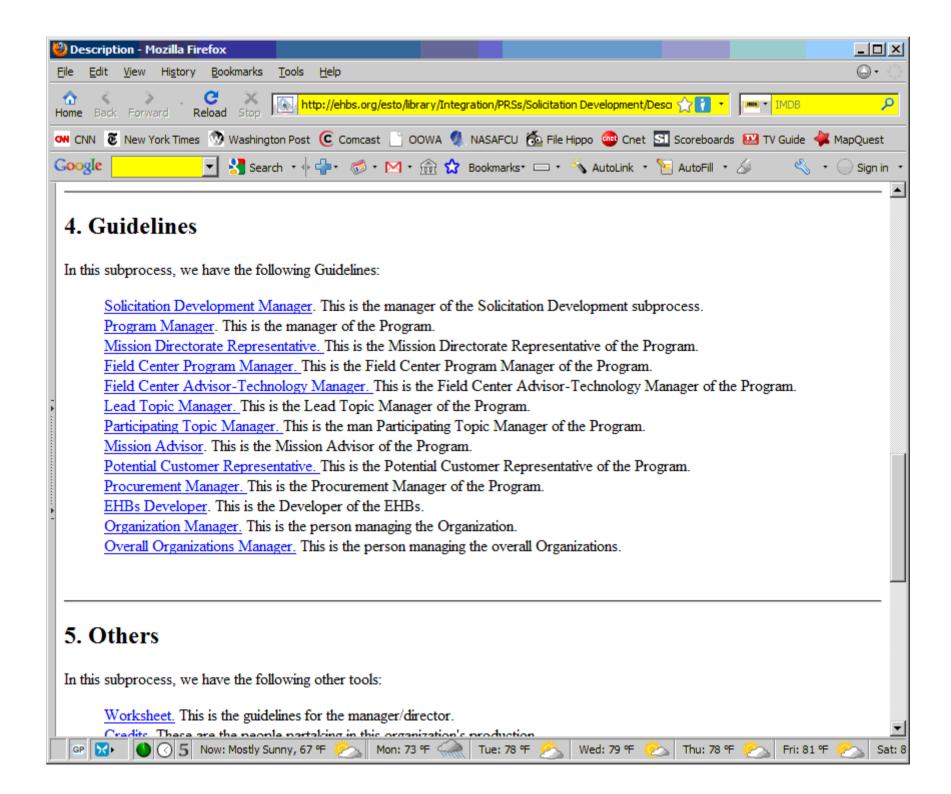




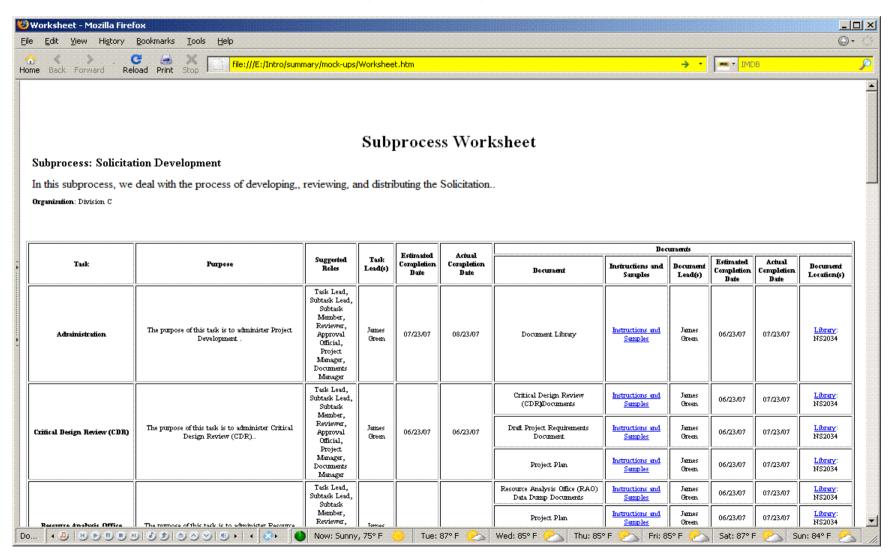


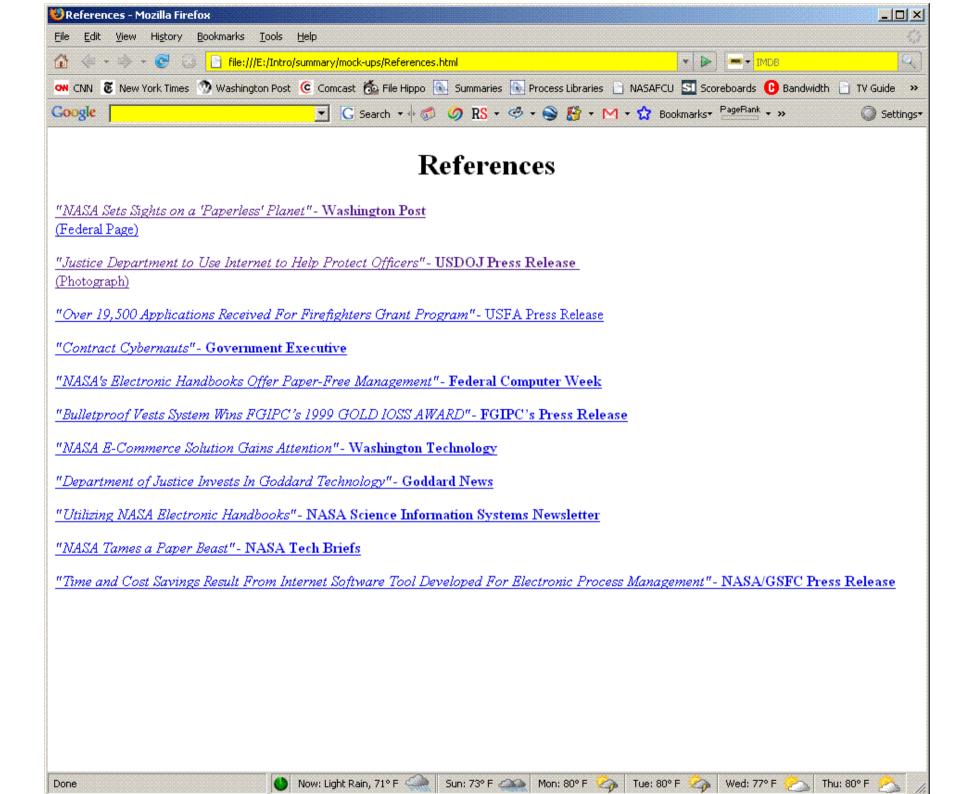


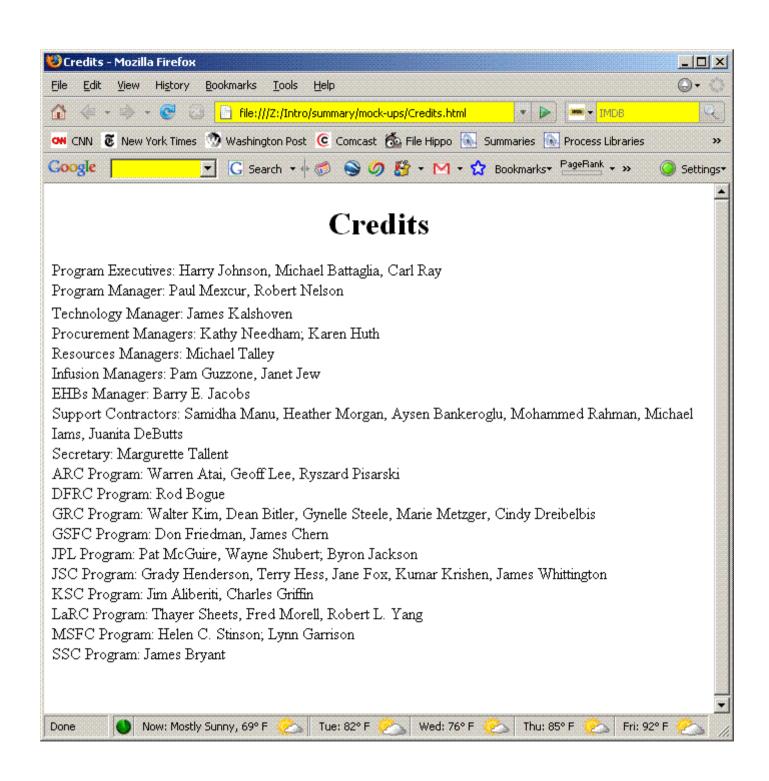




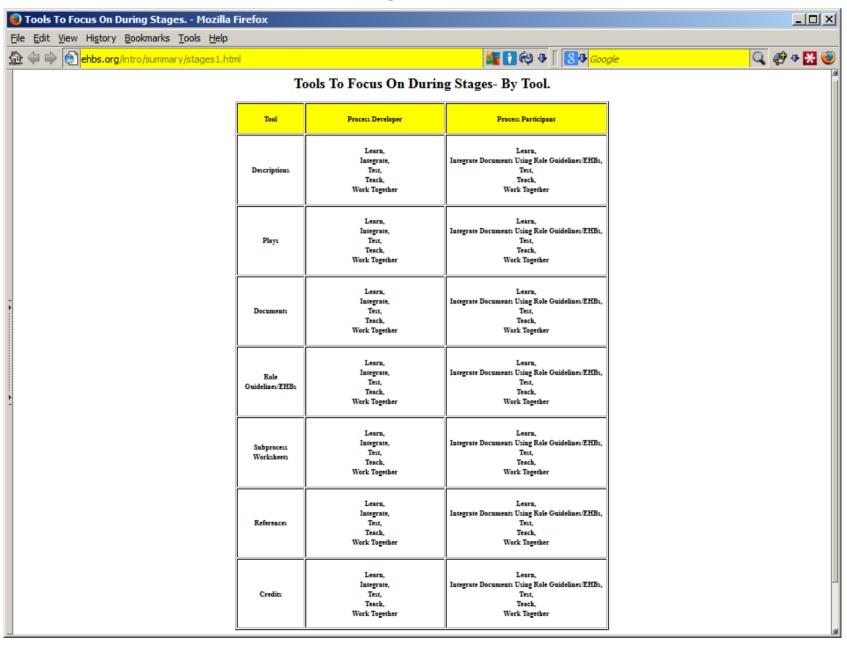
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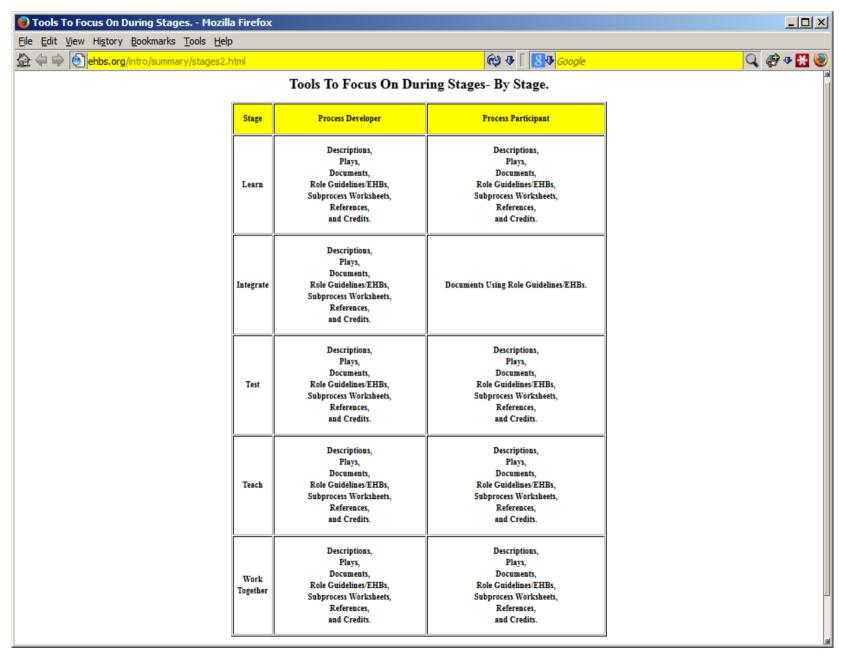


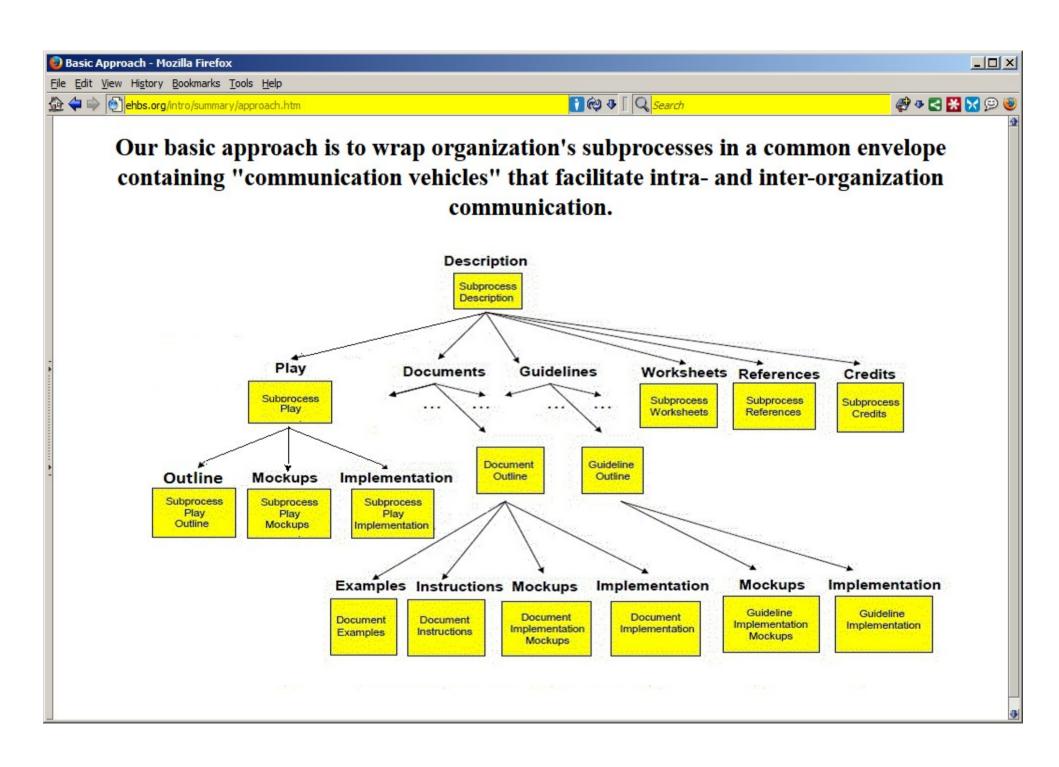


Tools that can be focused on during stagesby tool.



Tools that can be focused on during stagesby stage.

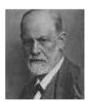








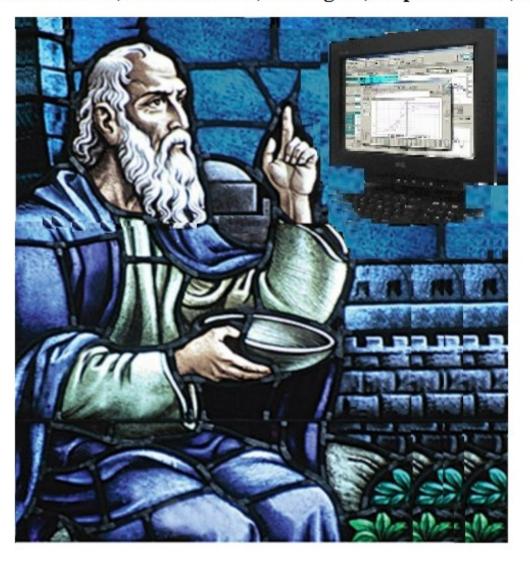
Process Libraries (PLs) and Electronic Handbooks (EHBs) are where Shakespeare meets Freud



- In Process Libraries (PLs), subprocesses are represented as "plays" where "actors" communicate thru the Internet. Each organization puts on its own "productions". For each role, Electronic Handbooks (EHBs) (also called Guidelines) guide "actors" thru their parts. Managers are "directors" using Worksheets as learning/management tools. Documentors serve as "playwrights". [Shakespearean]
- Organizations are represented as "families" having "multiple personalities".
 Subprocess "plays" and its "components" provide communication vehicles between members of the same family, different families, and families from different subprocesses. Documentors also serve as "family therapists". [Freudian]



The approach uses a modernization of the Socratic Method or Dialogue to gain consensus between Teachers, Documentors, Managers, Implementors, and Participants































Some Applications

DOI's Screen AVailable and Exchange-Sales (SAVES)- Property
DOJ's Bulletproof Vests Partnership Program (BVP)- Grants

DOJ's Local Law Enforcement Block Grants (LLEBG) - Grants

DOJ's Office of Justice Program IT Inititives (OJP IT) - Grants

DOJ's Southwest Border Patrol Initiative (SWBPI) - Grants

Federal Emergency Management Administration (FEMA) - Grants

FEMA's US Fire Administration (USFA)- Grants

HHS's Health Services Resources Administration (HRSA) - Grants

NASA's Earth Sciences Technology Office (ESTO)- Contracts

NASA's Educational Program Data Collection and Evaluation Program (EDCATs) - Program Evaluations

NASA's Small Business Innovation Research (SBIR)- Contracts

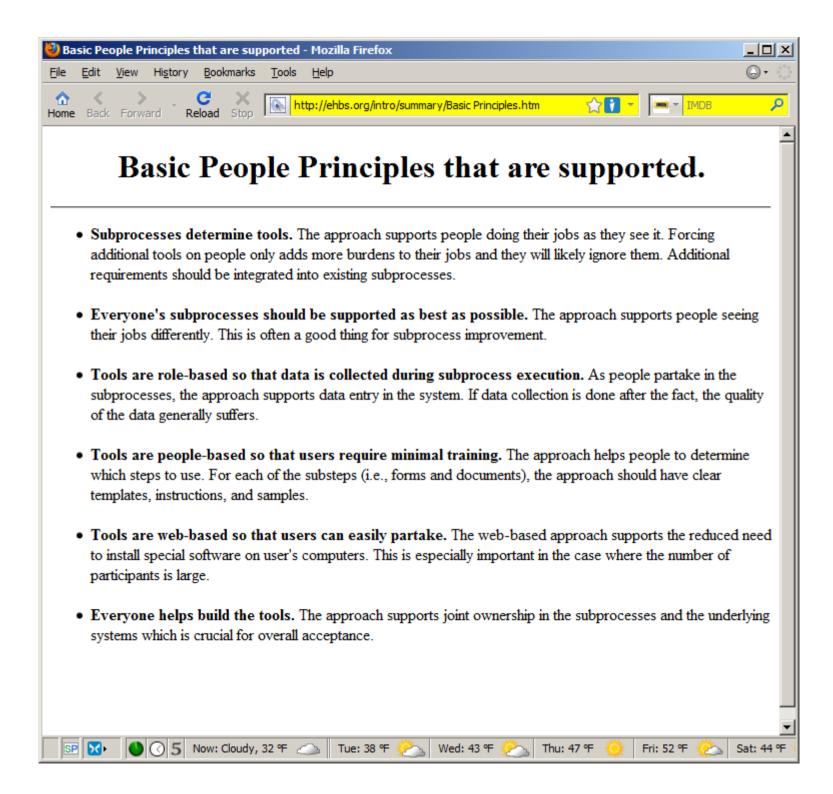
USDA's Emergency Response Information System (ERIS) - Grants

USDA's Integrated Item Tracking System-Reagents Ordering-Shipping System (IITS-ROSS) - Grants

USDA's Karnal Bundt Information System (KBIS) - Grants

Subprocess Life-Cycle Views that are supported.

- Organization subprocess teachers want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical) Organization subprocess teachers copy relevant organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library and then learn, integrate, test, and teach their new organization subprocess Plays/Documents/Guidelines/Worksheets.
- Organization subprocess documentors want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical) Organization subprocess documentors copy relevant organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library and then learn, integrate, test, and teach their new organization subprocess Plays/Documents/Guidelines/Worksheets.
- Organization subprocess managers want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical) Organization subprocess managers copy relevant
 organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library and then learn, integrate, test, and teach their new organization subprocess Plays/Documents/Guidelines/Worksheets.
- Organization subprocess implementors want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical) Organization subprocess implementors copy
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 /Guidelines/Worksheets.
- Organization subprocess participants want to quickly learn, integrate, and perform tasks that are part of their views. (Critical) Organization subprocess participants study the steps of their organization subprocess view Guidelines.
- Organization subprocess managers want to quickly monitor execution of tasks that are part of their views. Organization subprocess managers monitor the execution of tasks using their organization subprocess Plays/Documents/Guidelines/Worksheets.
- Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly update, test and teach their subprocesses. Organization subprocess teachers, documentors, managers, implementors, and participants update, test, and teach their organization subprocess Plays/Documents/Guidelines/Worksheets.
- Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly update, test, and teach using other organization's views. Organization subprocess teachers, documentors, managers, implementors, and participants update, test, and teach using other relevant organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library.
- Organization subprocess teachers, documentors, managers, implementors, and participants become hurt/angry when their views are not supported. Organization subprocess teachers, documentors, managers, implementors, and participants update, test, and teach their organization subprocess Plays/Documents/Guidelines/Worksheets.
- Organization subprocess implementors want to quickly update, test and teach tools that help facilitate execution of their subprocesses. Organization subprocess implementors update, test, and teach tools using requirements from Plays/Documents/Guidelines/Worksheets in the Process Library.
- Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly leave when their views continue not to be supported. Organization subprocess teachers, documentors, managers, implementors, and participants archive their organization subprocess Plays/Documents/Guidelines/Worksheets.
- The Key Human Factor Issue: Communication Within and Across Organizations. Organization subprocess Plays/Documents/Guidelines/Worksheets in Process Libraries facilitate intra- and inter- organization communication.

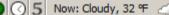




Subprocess/Play Developments that are supported.

- Presentation & Paper/Marketing. The approach supports presentation & paper/marketing using the contents of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Worksheet/Outlining. The approach supports worksheet/outlining using the drafting of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Temporal Flow/Playwriting. The approach supports temporal flow/playwriting using the drafting of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Examples/Rehearsal. The approach supports examples/rehearsals using the mockups of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Implementation/Staging. The approach supports implementation/staging using the building of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Utilization/Performance. The approach supports users utilization/performance using execution of Descriptions,
 Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Revision/New Production. The approach supports revision/new production using updates of the Descriptions,
 Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Closeout/End Production. The approach supports closeout/ end performance using storage of the Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.













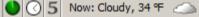




Process Library Operations that are supported.

- Organization Subprocess Formulation. The approach supports the introduction of new organizations and their subprocesses into the library.
- Organization Subprocess Implementation. The approach supports implementation of common tools for organizations in the library.
- Organization Subprocess Customer Support. The approach supports user requests for the library.
- Organization Subprocess Evaluation. The approach supports organization subprocess evaluations.
- Organization Subprocess Update. The approach supports the updating of organizations and their subprocesses in the library.
- Organization Subprocess Closeout. The approach supports the closeouts of organizations and their subprocesses from the library.

















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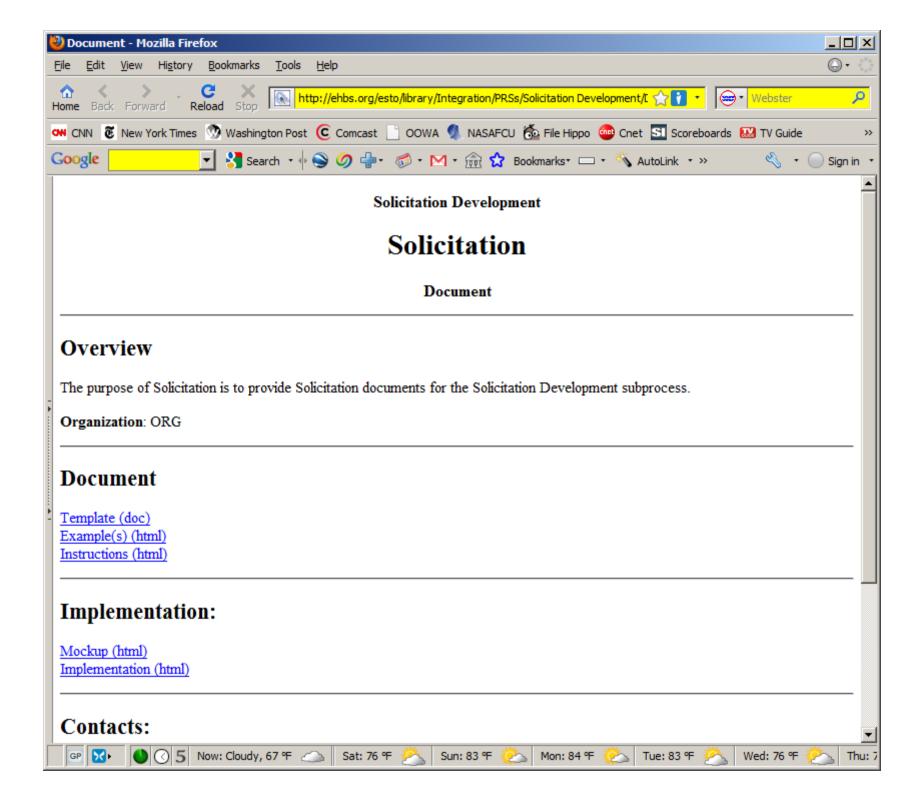


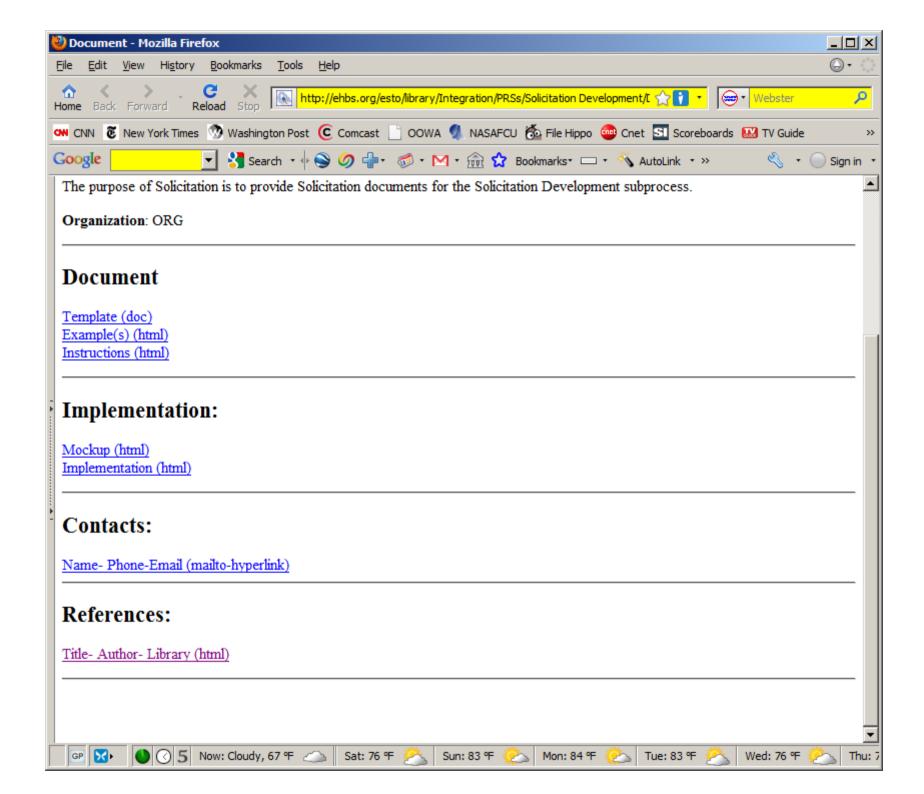


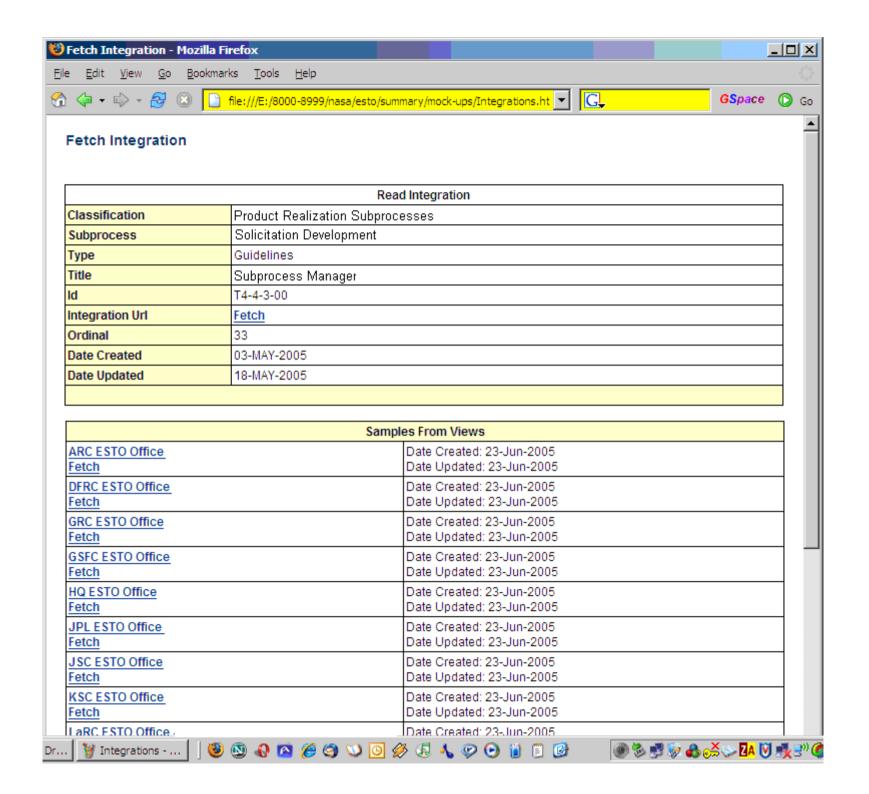
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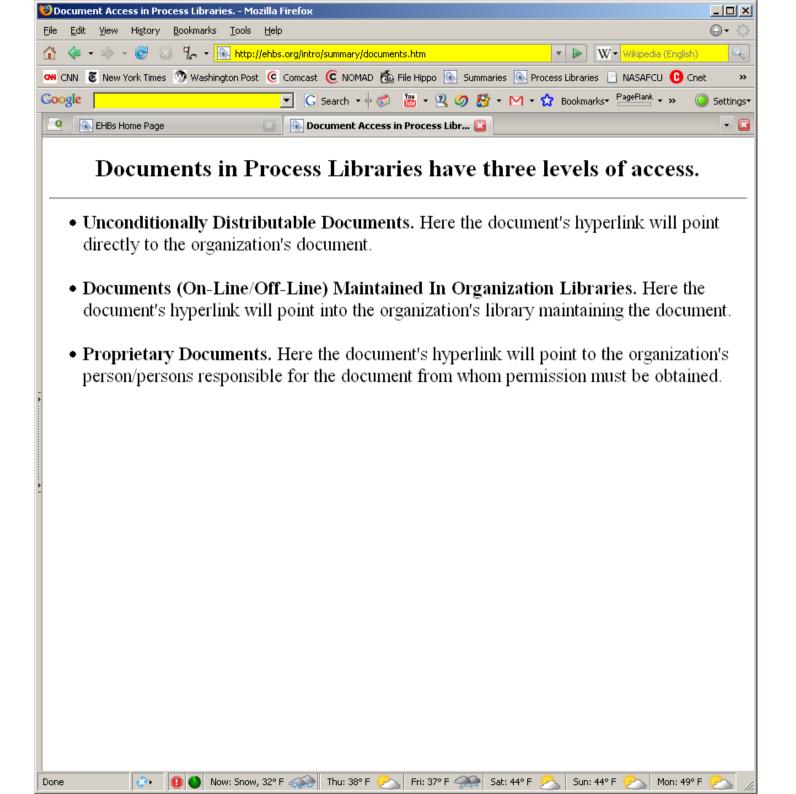


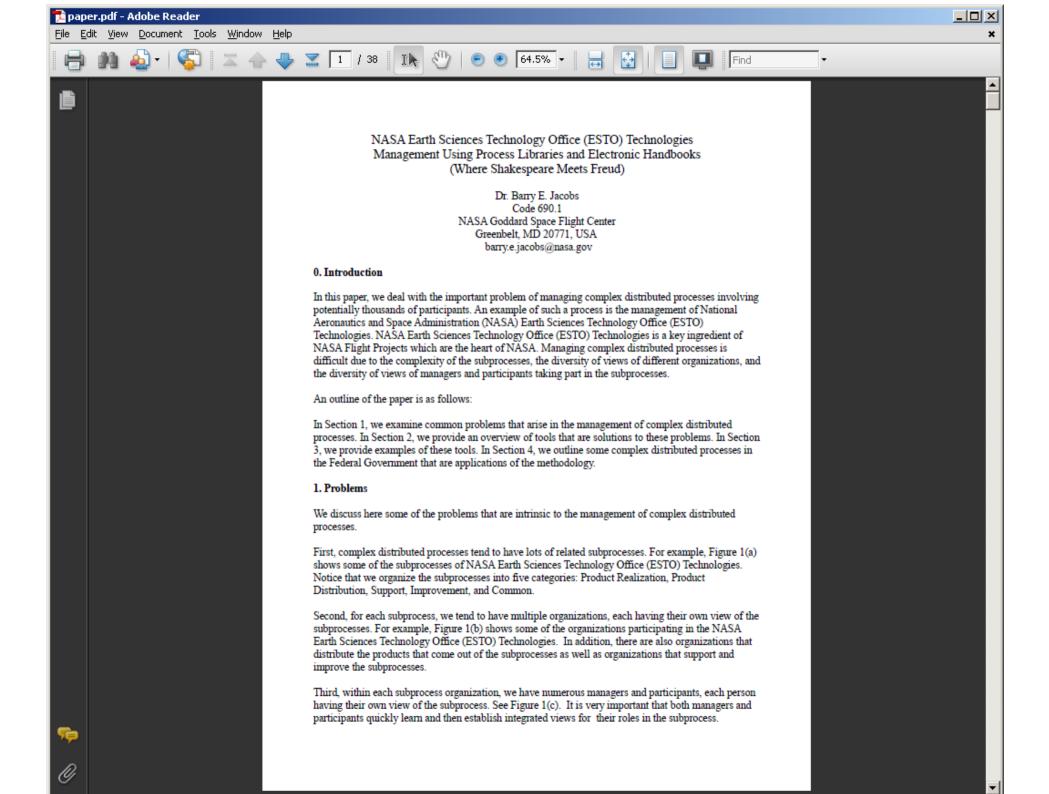


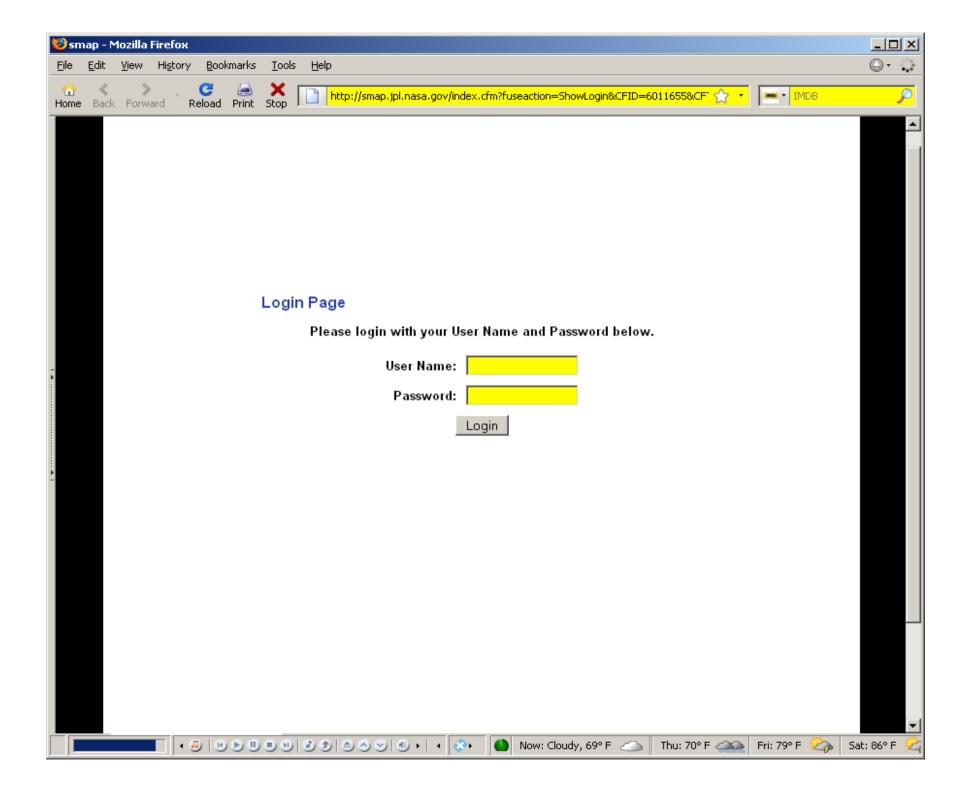
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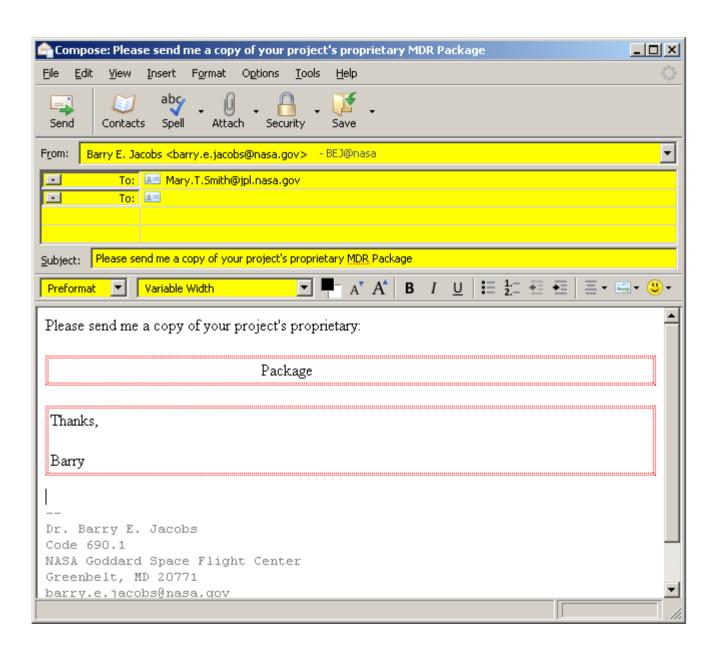
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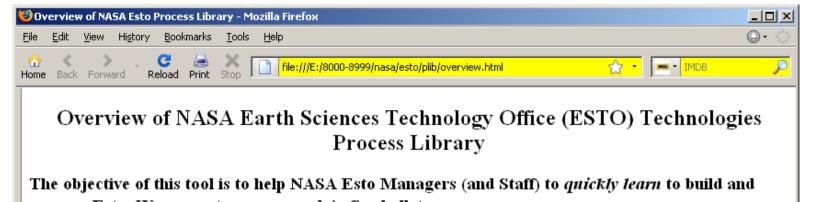
Subprocess Worksheet

Subprocess: Solicitation Development

In this subprocess, we deal with the process of developing,, reviewing, and distributing the Solicitation..

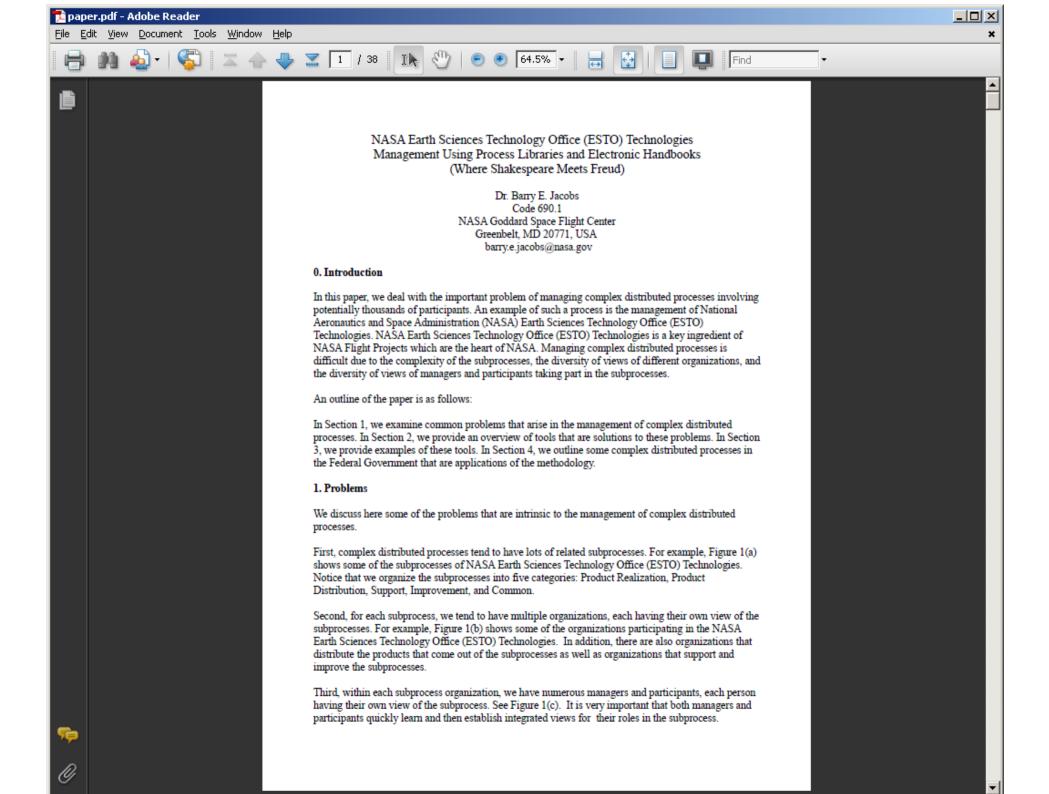
Organization: Division $\mathbb C$

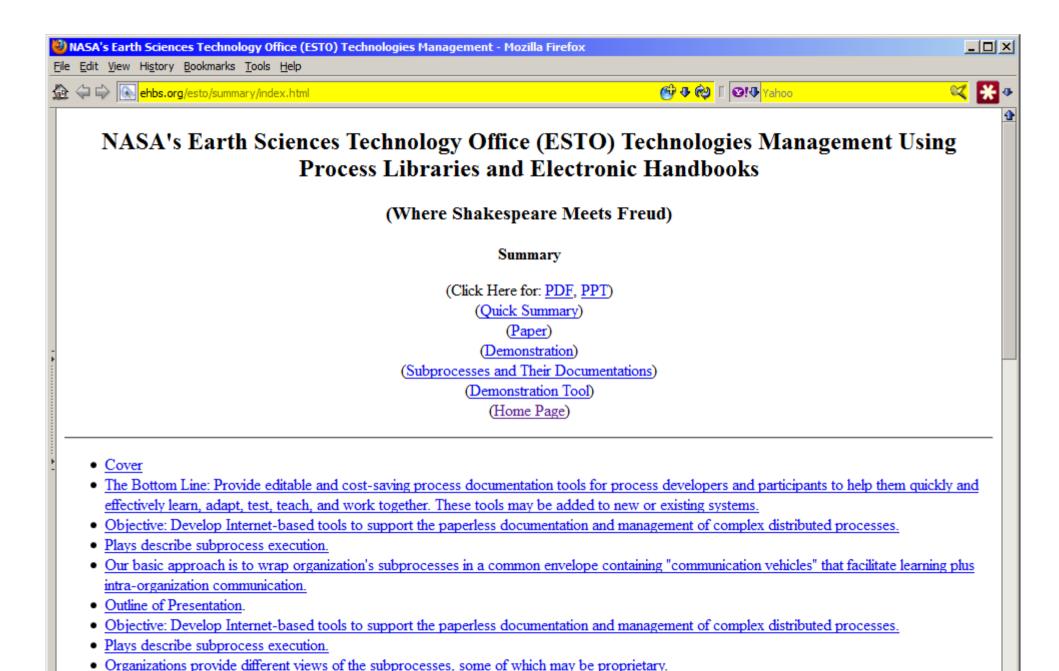
	Task	Purpose	Suggested Roles	Task Lead(s)	Estimated Completion Date	Actual Completion Date	Documents					
							Document	Instructions and Samples	Document Lead(s)	Estimated Completion Date	Actual Completion Date	Document Location(s)
	Administration.	The purpose of this task is to administer Project Development .	Task Lead, Subtask Lead, Subtask Member, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	07/23/07	08/23/07	Document Library	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
	Critical Design Review (CDR)	The purpose of this task is to administer Critical Design Review (CDR)	Task Lead, Subtask Lead, Subtask Member, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	06/23/07	06/23/07	Critical Design Review (CDR) Documents	Instructions and Samples	James Green	06/23/07	07/23/07	<u>Library</u> : NS2034
							Draft Project Requirements Document	Instructions and Samples	James Green	06/23/07	07/23/07	<u>Library</u> : NS2034
							Project Plan	Instructions and Samples	James Green	06/23/07	07/23/07	<u>Library</u> : NS2034
			Task Lead, Subtask Lead, Subtask Member, Reviewer,				Resource Analysis Office (RAO) Data Dump Documents	Instructions and Samples	James Green	06/23/07	07/23/07	<u>Library</u> : NS2034
	Recourse âmalysis Offise	The remonce of this task is to administer Peconπo		Tomas			Project Plan	Instructions and Samples	James Green	06/23/07	07/23/07	<u>Library</u> : NS2034



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- We focus on the documents that NASA Esto Managers prepare. These documents appear within various subprocesses (e.g., 1) and within multiple organizations (e.g., 2).
- For each subprocess, we create a directory of documents for that subprocess. (e.g., 1, 2)
- For each document type, we create files to help prepare the document. These files include document overview, organization, related links, structure, references, organization samples, organization contacts, and sample documents from other organizations. (e.g., 1, 2)
- Sample documents have three levels of access: a) Unconditionally Distributable (e.g., 1, 2), b) Maintained In Organization Libraries (e.g., $\underline{1}$, $\underline{2}$), and c) Proprietary (e.g., $\underline{1}$, $\underline{2}$).
- Each organization gets worksheets for its own use. These worksheets also help add to the database as Managers go thru the subprocesses. (e.g., 1, 2)

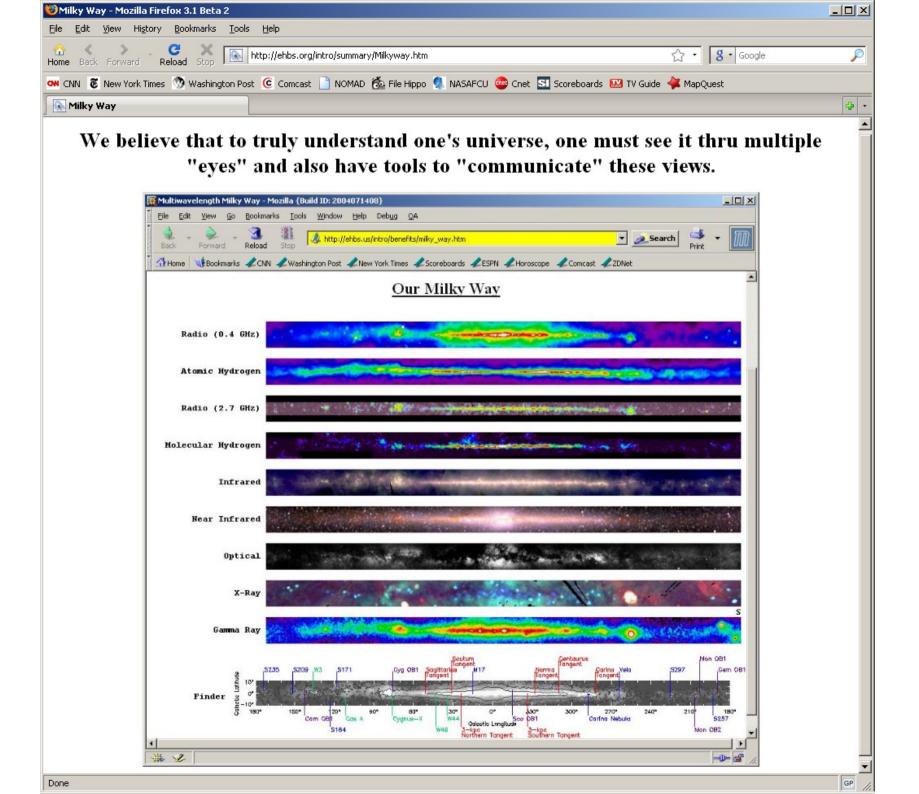


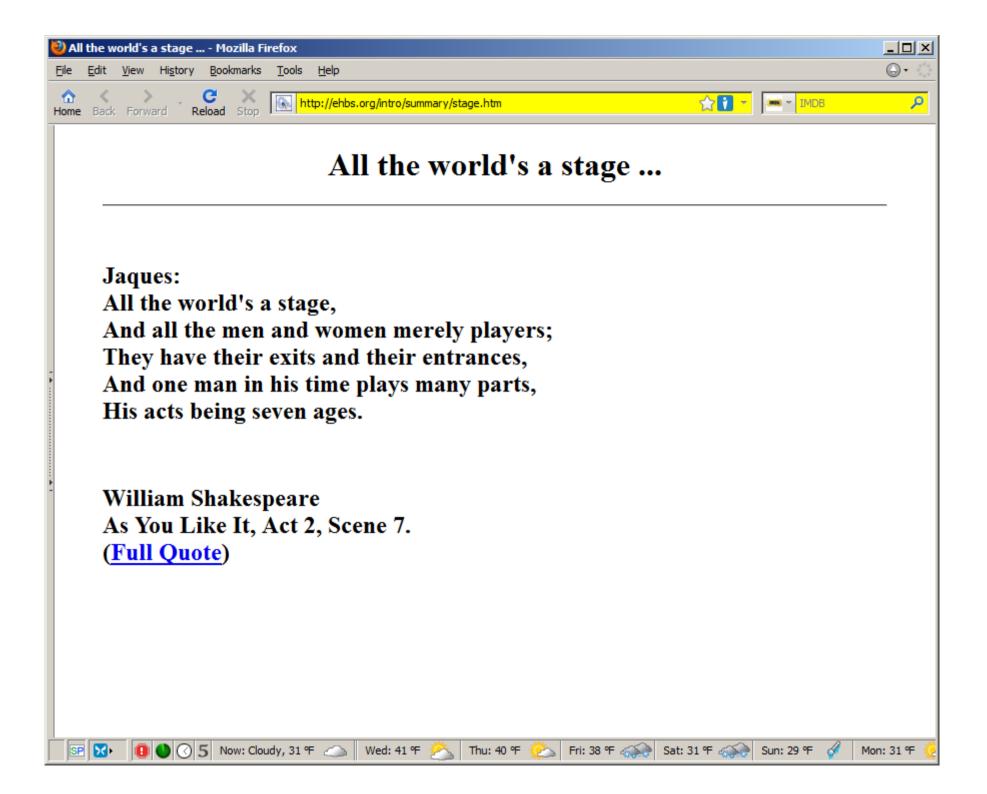


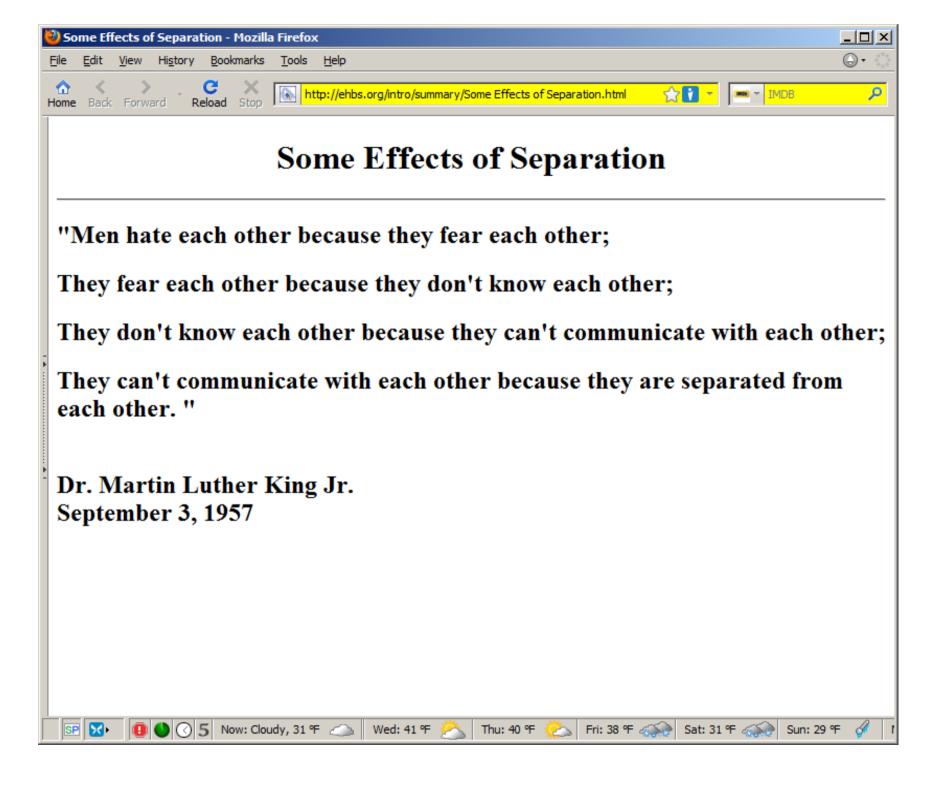
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People in organizations provide different views of the subprocesses.

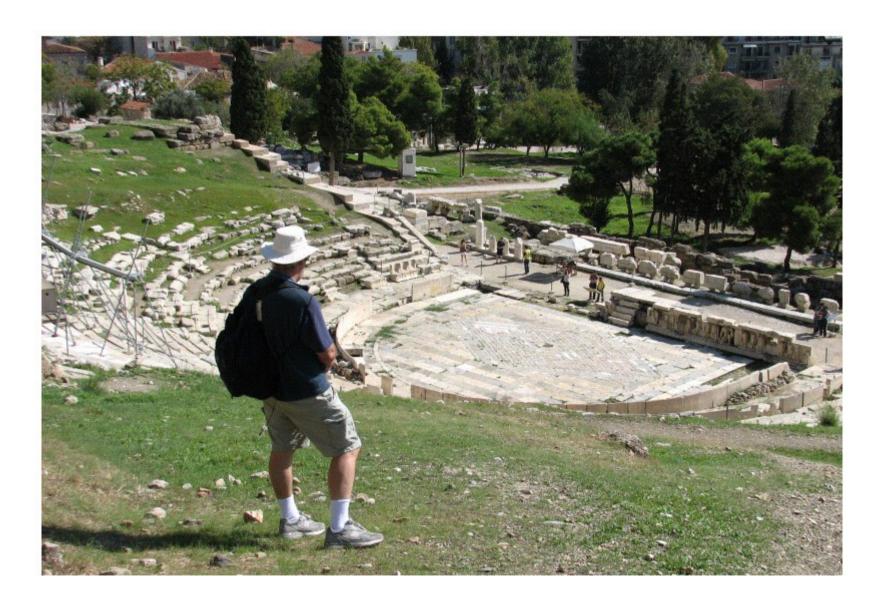
Organizations generate Subprocess Life-Cycle Views.







Theatre of Dionysus- Athens, Greece



For More Details

