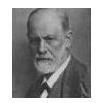
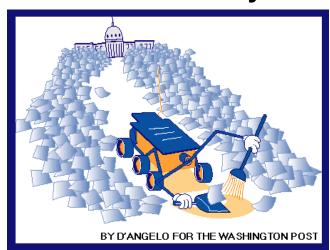
NASA Hardware Management Using Process Libraries and Electronic Handbooks



(Where Shakespeare Meets Freud)



Quick Summary



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

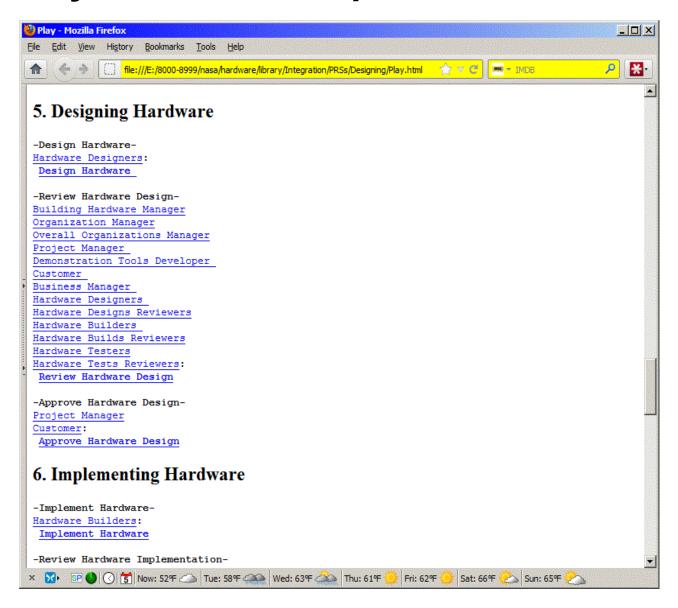
The Bottom Line:

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.



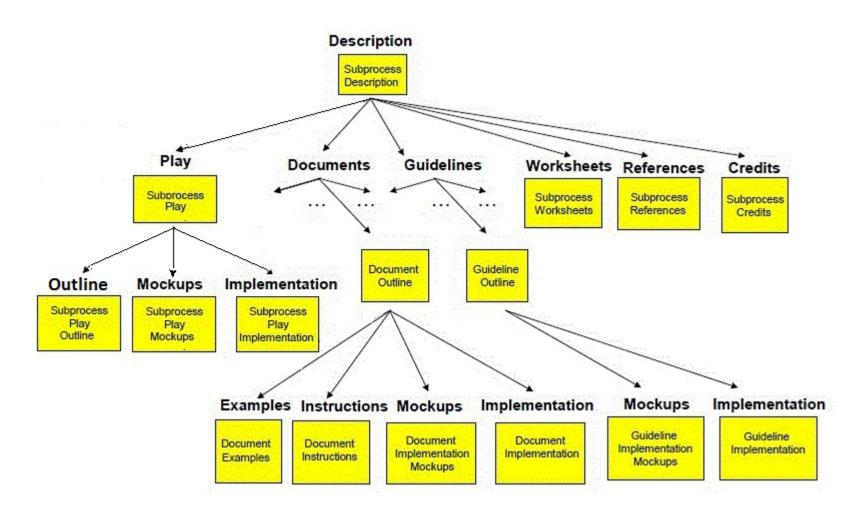
Benefits:

- 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.

For each subprocess, an "Integration View" is the integration or combination of other subprocess views. An "Integration View" facilitates intra- and inter-organization communication.



All the world's a stage ...

Jaques:

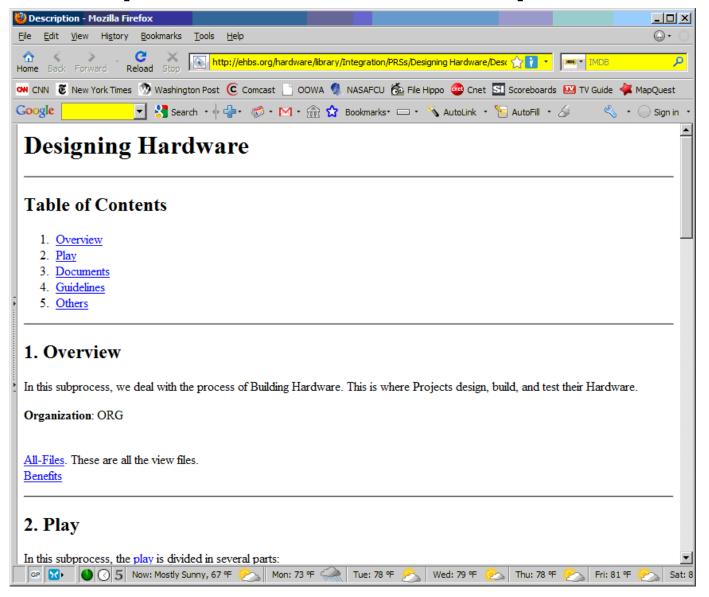
All the world's a stage,
And all the men and women merely players;
They have their exits and their entrances,
And one man in his time plays many parts,
His acts being seven ages.

William Shakespeare
As You Like It, Act 2, Scene 7.

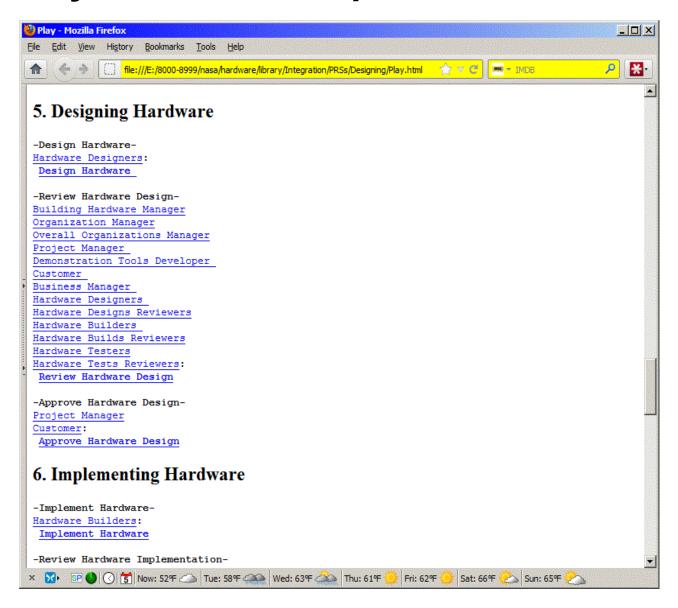
The approach uses a modernization of the Socratic Method or Dialogue to gain consensus between Teachers, Documentors, Managers, Implementors, and Participants.



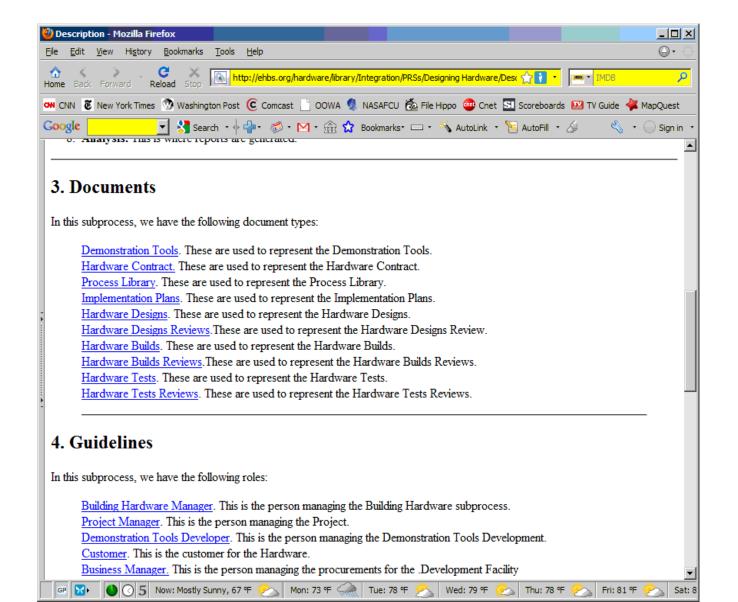
Descriptions summarize subprocesses.



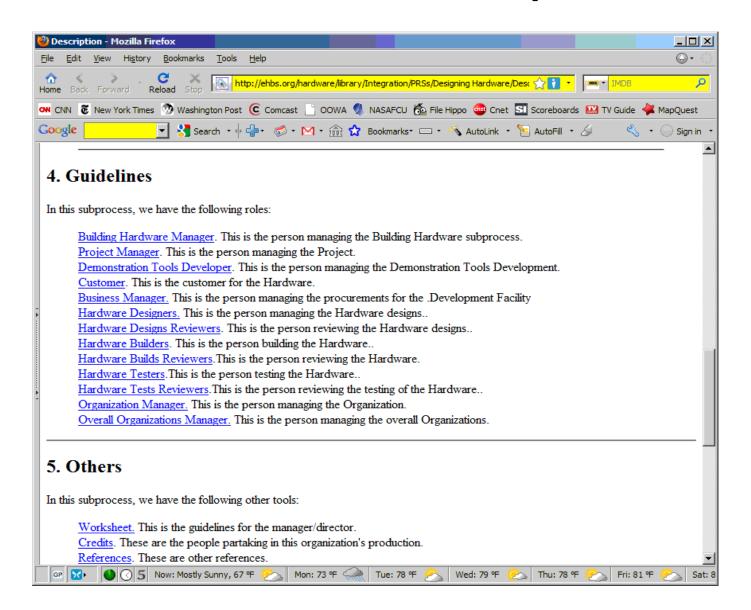
Plays describe subprocess execution.



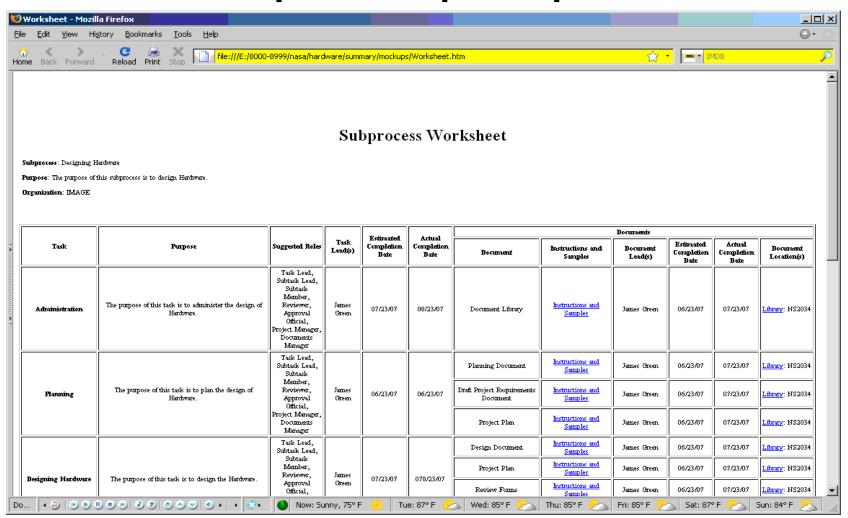
Documents describe subprocess data.



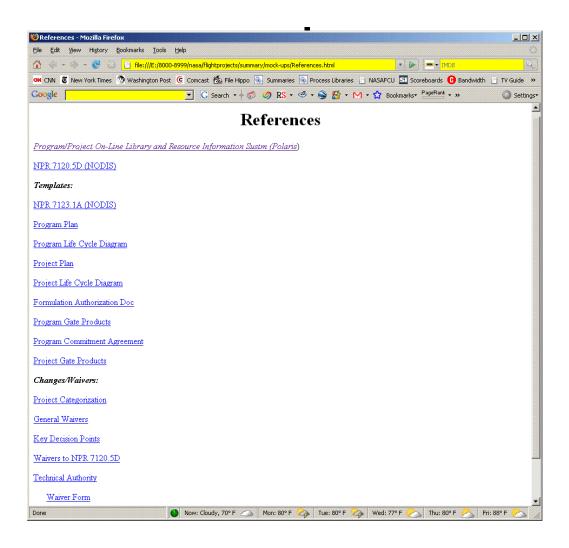
Guidelines describe user subprocesses.



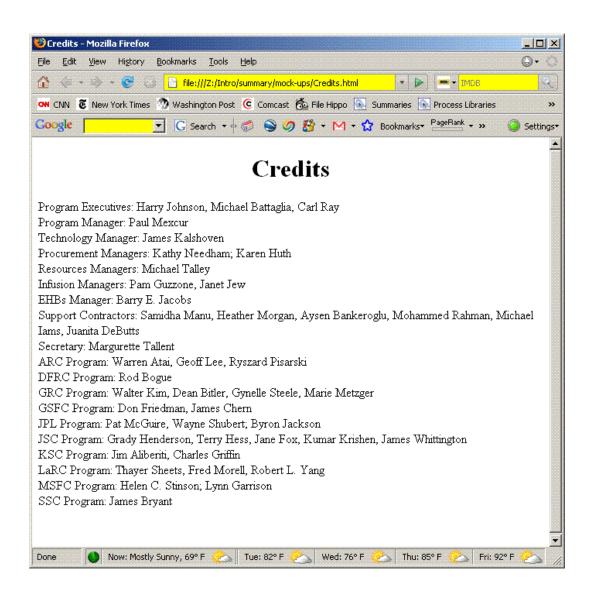
Subprocess Worksheets facilitate subprocess manager communication with process developers and participants.



References list other related resources.



Credits acknowledge people's contributions.



Tools that can be focused on during stagesby tool.

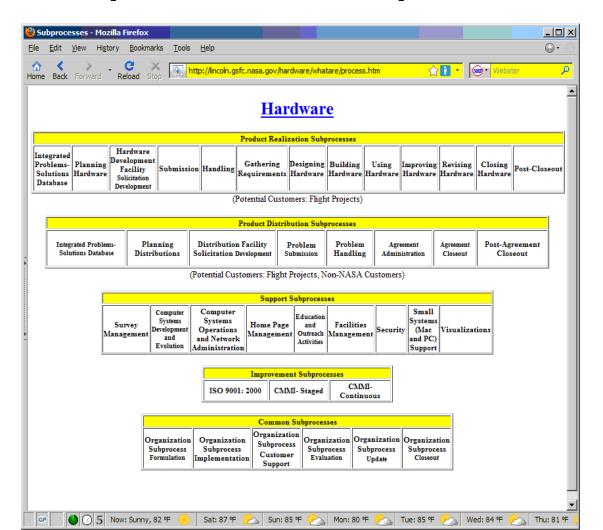


Tools that can be focused on during stagesby stage.

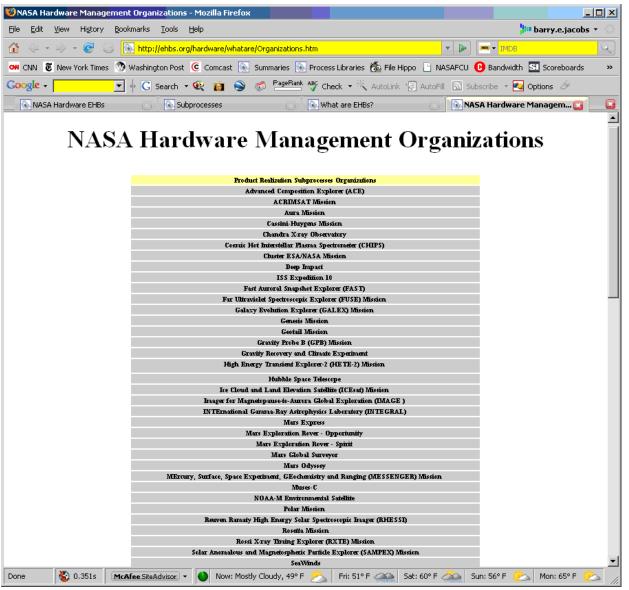


Objective:

Develop Internet-based tools to support the paperless documentation and management of complex distributed processes.



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



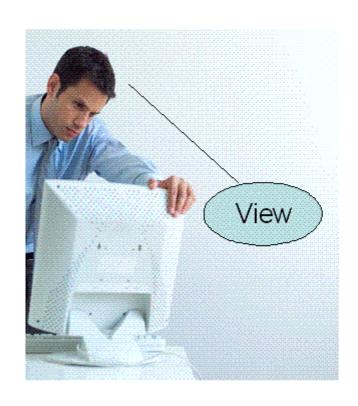
Organizations execute the eight "Play Development" stages.

- 1) summarizing (descriptions),
- 2) playwriting (outlines),
- 3) staging (mockups),
- 4) dress rehearsal (implementations),
- 5) performance (implementations),
- 6) evaluations (implementations),
- 7) revisions (outlines, mockups, implementations),

and

8) closing.

People in organizations provide different views of the subprocesses



Subprocess Documentor's View



Subprocess Teacher's, Manager's, Implementor's and Participant's Views

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".

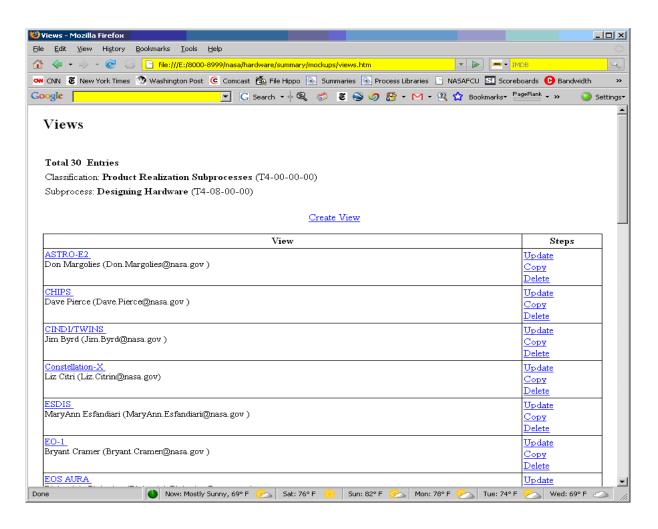
The "Game of Telephone" Syndrome: Where People Pass-On Only Parts of the "Message"



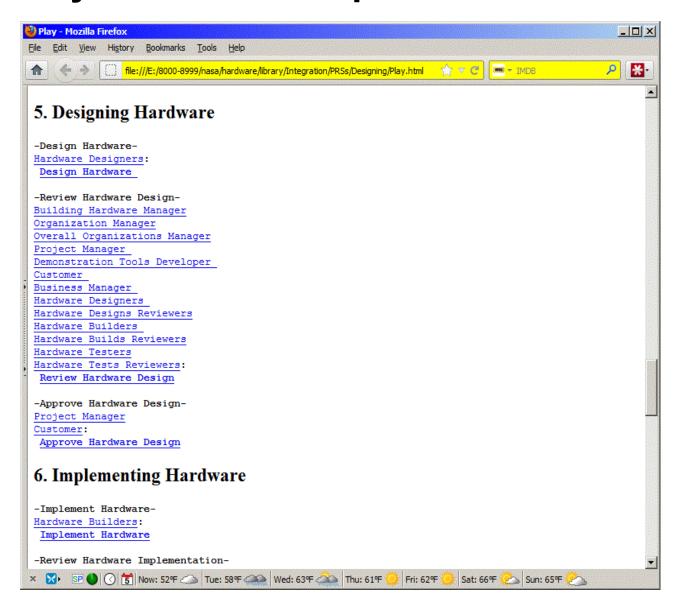
Overview of how editable and cost-saving process documentation tools can solve problems.

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.

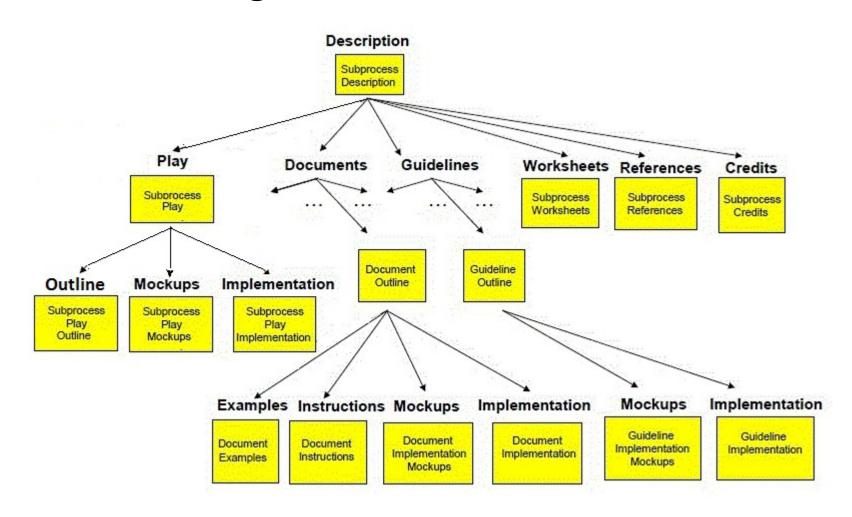
Solution: Process Libraries maintain organization's views of the subprocesses.



Plays describe subprocess execution.



Our basic approach is to wrap organization's subprocesses in a common envelope containing "communication vehicles" that facilitate intra- and inter-organization communication.



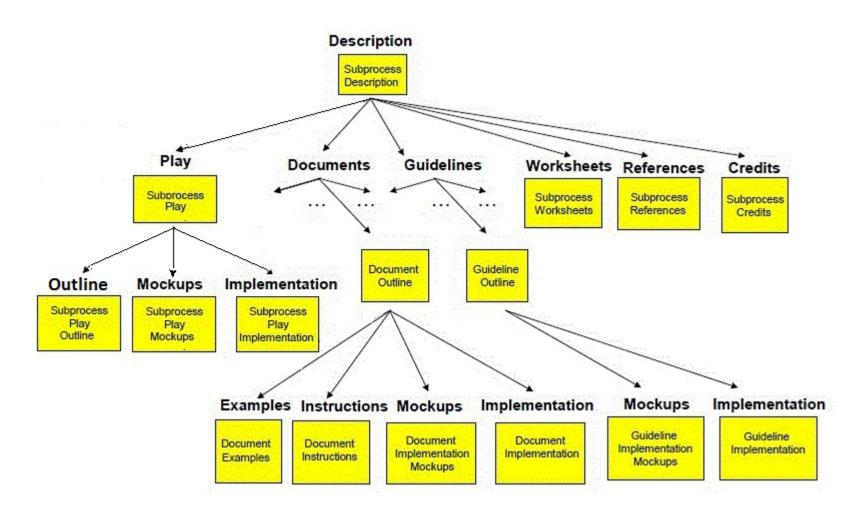
Tools that can be focused on during stagesby tool.



Tools that can be focused on during stagesby stage.



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Some Applications

<u>USDA's Integrated Item Tracking System-Reagents Ordering-Shipping System (IITS-ROSS) - Grants</u> USDA's Karnal Bundt Information System (KBIS) - Grants

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

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Federal Emergency Management Administration (FEMA) - Grants

FEMA's US Fire Administration (USFA)- Grants

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

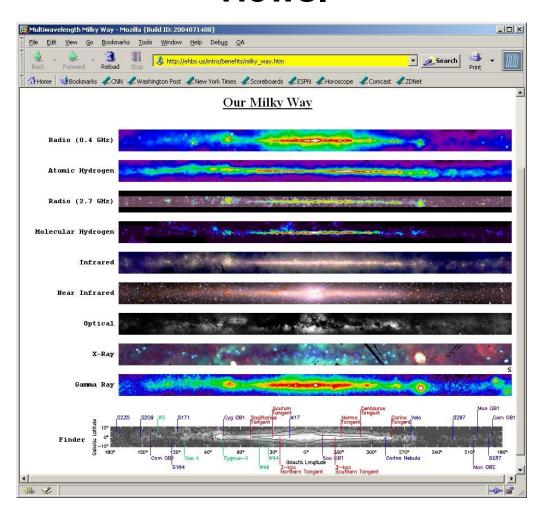
NASA's Earth Sciences Technology Office (ESTO)- Contracts

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

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





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]

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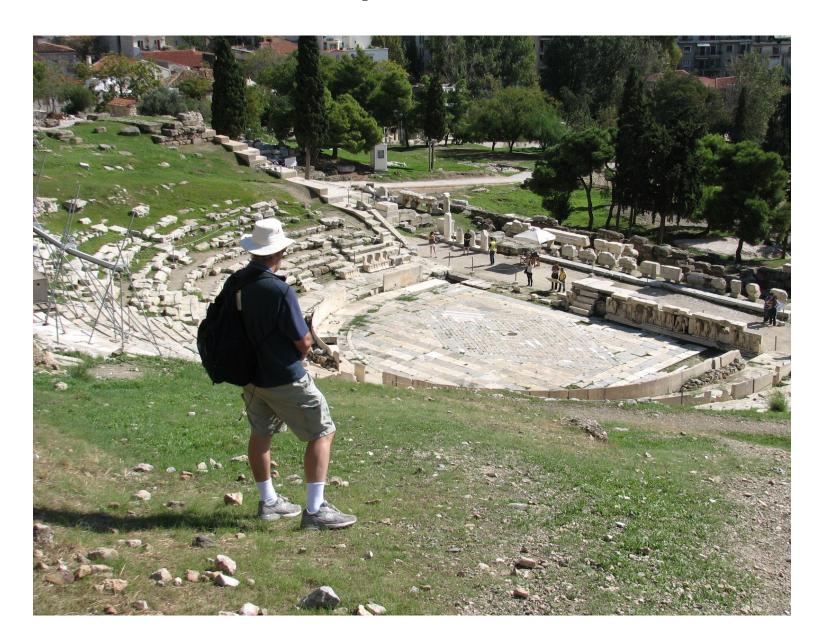
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Theatre of Dionysus- Athens, Greece



For More Details

