



Rolling Out New Technology: Issues and Solutions In Portal Deliveries

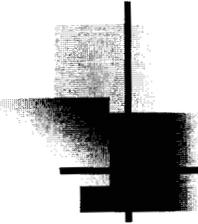
Jayne Dutra

KM Information Architecture and Web Publishing

NASA Jet Propulsion Laboratory

Intranets 2003

October 14, 2003



ELIAS: The Old Internal Home Page

ELIAS – Electronic Laboratory Information Access System

- Debuted in 1996
- Static HTML site
- Mainly a large index of web sites
- Poor search, no news, no directories, no personalization, no application integration
- No nuthun!

Screen Shot of ELIAS

ELECTRONIC LABWIDE INFORMATION ACCESS SYSTEM

Graphic Menu | Text Menu | Search JPL | ELIAS Index | Feedback | Help

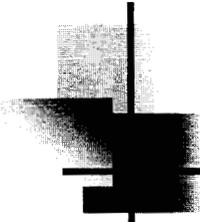
Welcome to JPL <ul style="list-style-type: none">■ About JPL■ Educational Outreach■ Industrial Outreach	News & Announcements <ul style="list-style-type: none">■ ELIAS Updates■ Calendars■ Bulletin Board■ News Room																
Exploration & Development <ul style="list-style-type: none">■ Planetary & Space Exploration■ Research & Engineering■ Institutional Programs	People & Places <ul style="list-style-type: none">■ Directories■ Organizations■ External Resources																
Products & Publications <ul style="list-style-type: none">■ Technical Publications■ Images & Other Scientific Data■ Patents	Policies & Standards <ul style="list-style-type: none">■ Administrative & Institutional■ Program Projects & Technical■ External Regulations																
Resources, Services & Information <table border="0"><tr><td>■ Employee</td><td>■ Property</td><td>■ Office Needs</td><td>■ Info Services</td></tr><tr><td>■ Timekeeping</td><td>■ Facilities</td><td>■ Meetings</td><td>■ Engineering</td></tr><tr><td>■ Travel</td><td>■ Acquisition</td><td>■ Funding Opps.</td><td>■ Computing</td></tr><tr><td>■ Safety & Security</td><td>■ Finance</td><td>■ Contracts</td><td></td></tr></table>		■ Employee	■ Property	■ Office Needs	■ Info Services	■ Timekeeping	■ Facilities	■ Meetings	■ Engineering	■ Travel	■ Acquisition	■ Funding Opps.	■ Computing	■ Safety & Security	■ Finance	■ Contracts	
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■ Travel	■ Acquisition	■ Funding Opps.	■ Computing														
■ Safety & Security	■ Finance	■ Contracts															

JPL BASICS

- [JPL Online Phonebook](#)
- [JPL Interactive Maps](#)
- [Timecard Log-In](#)
- [JPL Conference Rooms](#)

JPL NEWS

- [Front Page News](#)
- [All Personnel E-mail](#)
- [Mars Town Hall Meeting](#)



Inside JPL: The New Internal Home Page

- Developed with seed money from NASA CIO
- Based on portal technology
- Dynamic information refreshed regularly
- Includes news and announcements from major Lab service providers
- Also has directories:
 - White Pages, Yellow Pages, Web Space Directory, Maps
- External news from NASA and commercial partners

Screen Shot of Inside JPL


Inside JPL
 a portal to the JPL Intranet
 Jet Propulsion Laboratory
 California Institute of Technology
 Contact the Webmaster
 Report A Problem | Home | Content | Layout | Help | Log Out
 Friday, July 25, 2003
 Page 2

User Information

Welcome! Jayne
 Last Update: Getting Started
 July 25, 2003 7:38:32 AM PDT

JPL Office of the Director


JPL Office of the Director
 Presentations and information from the OOD

Messages from Inside JPL

- Implementing the NASA Vision
- Figuerola, April 3rd, 2003
- Implementing the NASA Vision: JPL Plans for Space Science
- Tattni, April 3rd, 2003
- Implementing the NASA Vision at GSFC
- Townsend, April 3rd, 2002

Daily Planet

NEW! 'Survivor' Dave Johnson at Library July 31
 (posted July 29)
 Dave Johnson of Section 352 didn't win \$1 million earlier this year on CBS' "Survivor: the Amazon," so he's back to work at JPL. Come hear his story at the Library, Building 111, on Thursday, July 31, at 4 p.m.
NEW! Entries sought for MLK quilt
 (posted July 29)
 Next ACW panel on Monday
 (posted July 23)

Directory to JPL Web Space

Directory to JPL Web Space
Business & Administration
 Acquisition, Budget and Financial, Events, JPL Communication Vehicles, JPL Newsgroups...
Institutional News and Events
 JPL Organizations
 Hierarchically by Directors, List of Service Organizations...
Employee Resources
 101, JPL Store, Timekeeping, Cafeteria Menus, Credit Union, JPL Working Parents...

My Calendars

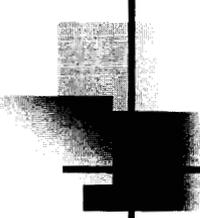
JPL Master Calendar
 Today's Events
 Submit a Master Calendar event
 JPL Space Calendar
 NASA Launches

Status and Alerts

ELEVATED
 Homeland Security Advisory System
BRAVO
 Terrorist Condition
 JPL IT Operational Status

Quick Links

JPL Organizational Charts
 JPL Interactive Maps
 Printable Phone Book
 Timecard Log In
 Cafeteria Menus



Usage Statistics

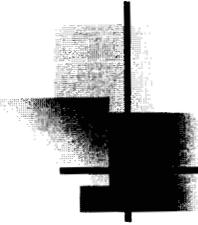
- ELIAS

- Top traffic was 4,660 unique users
- Monthly hits – 364,000

- Inside JPL

- Over 6,000 unique users – basically the whole Lab
- Averages 800,000 hits a month

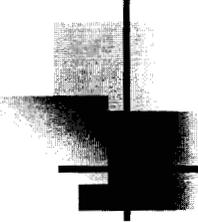
- How did we get those numbers?



Design Touch Points

Know your audience – really well

- Demographic samplings of communities
 - Managers, scientists, engineers, administrative
 - Publishers
 - Top users
- Personality traits of user types
- Many documented interviews, focus groups, surveys
- Task Analysis
- Use of the Web – usually tied to tasks

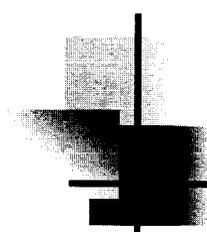


Make Your Product Sticky

- What has the most value to your customer base?
- What helps them get their work done?
- What types of information are "agnostic"?
- Be specific; be general
- Be sure your product is **usable**

Fragment of Ongoing Communications Plan

Date	Vehicle	Audience	Presenters	Message	Barriers
06/01/99	ELIAS User Survey	235 employees as a demographic representation of the Lab's population	Jayne Dutra, Charlotte Marsh, Vicki Laidig	Solicit input as to the present state of ELIAS, what's working for users and what they would like to see changed or added	ELIAS had been around for about five years in a frozen state and employees didn't really believe that it would change
6/99-10/00	ELIAS information Publisher one on one interviews	Information publishers from HR, OOD, This Week, Universe, Facilities, Security, NBS, TMOD, etc.	Jayne Dutra, Charlotte Marsh, Vicki Laidig	Gather requirements from major publishers and introduce them to the idea of portal technology	Publishers had been practicing the same procedures for a long time; resistance to change
02/10/00	Von Karman ICIS Noontime Talk "ELIAS Grows Up"	All employees	Jayne Dutra, Charlotte Marsh, Vicki Laidig	Raise awareness of JPL's internal home page and the changes being made to it; introduce the concept of portal technology	People don't use ELIAS because it's outdated, not intuitive, and the search is not effective; Summary of quick fixes
Ongoing	ICIS News Bytes	All employees	Vicki Laidig, Jayne Dutra	Raise awareness of ELIAS and coming changes	General apathy and belief that the institution doesn't care about employee concerns
May/June '00	CIS News Articles	All employees	Jayne Dutra, Linda Davis, Vicki Laidig	Raise awareness of ELIAS and Quick Fixes with more changes to come	General apathy and belief that the institution doesn't care about employee concerns
04/14/00	Universe Article	All employees	Mark Whalen, Vicki Laidig, Jayne Dutra,	Raise awareness of ELIAS and Quick Fixes with more changes to come	General apathy and belief that the institution doesn't care about employee
Ongoing	Digest of ELIAS customer feedback reports - passed to Jayne for review and long term consideration	All employees	Charlotte Marsh	Documentation of user problems and suggestions; build user loyalty through prompt customer service	Employees don't believe anyone listens to their concerns and reacts to them effectively



On the Road to Delivery

- Iterate
 - Use prototypes and pilots
 - Build a group of true believers
- Listen to your customers
- Add what they tell you
 - Build trust over time
- Create buzz and excitement
- Get your top corporate sponsor to help
 - Create win-win situations

Customer Satisfaction Survey Fragment

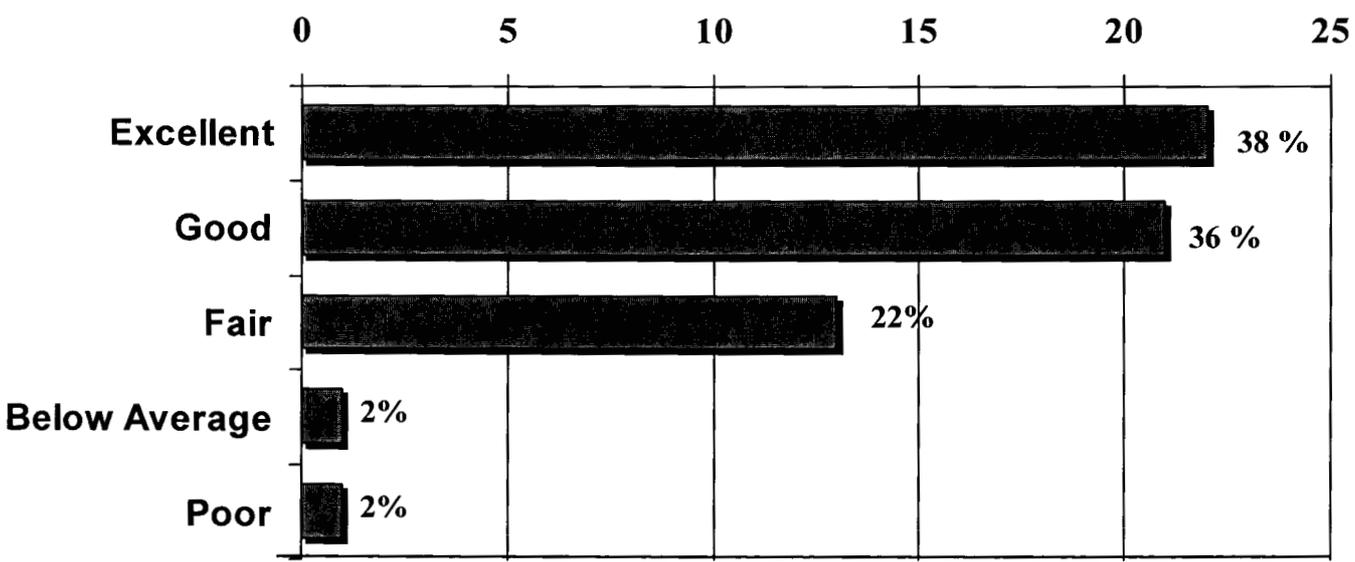
Post Prototype Period – 7/16/01

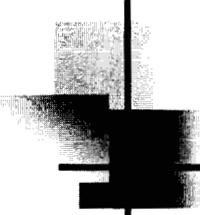
Question 4a:

Rate the following portal features

Ease of content selection

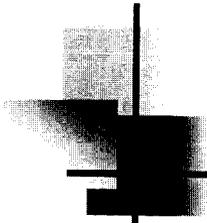
For All Users:





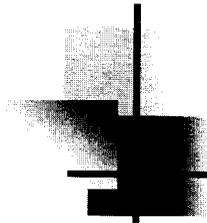
Hold the Publishers' Hands

- Had to explain the concept to the publishers so they would own channels
- Stressed the value of better Lab-wide communications
- Showed them that their traffic would increase as users were referred to them by their portal channel
- ***Crucial: Got their buy in to keep content fresh***
- Provide templates and style guide



Launch Strategies

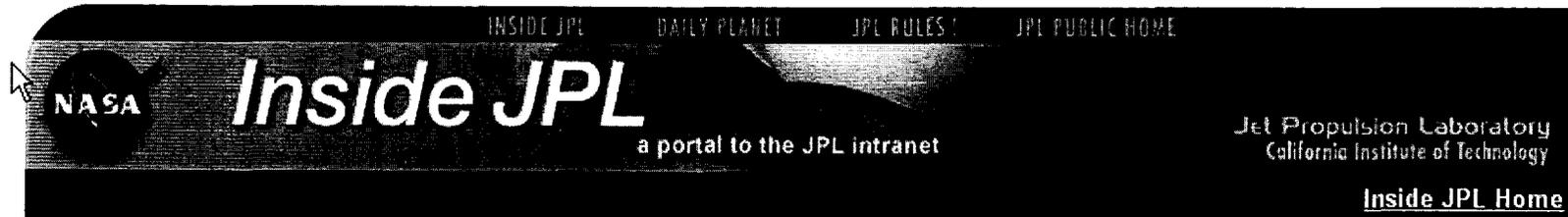
- Rolling delivery
 - One directorate at a time
 - Many, many presentations
 - Start with the top layer of managers and work down to groups
 - Do one-on-ones for key customers
 - Use networks – secretaries
 - Use informal communities of practice



Inch by Inch....

- Open or default portal page
 - Customer not forced to log in
 - Time to get used to the idea and the new GUI
- Reserve some snazzy channels as rewards for folks who log in and customize
- Supporting Web site explaining portal concepts, basic functionality and user benefits

Inside JPL Welcome Page with Overview Material



Welcome to Inside JPL

What is a Portal?

A portal is:

- a home page that can be personalized
- an electronic gateway to the JPL intranet
- a replacement for ELIAS
- a place to collect the links, headlines and business applications that are most important to you
- funded by the [JPL Knowledge Management Program](#) and [ICIS](#)

[Read the Complete Portal Overview](#)

Inside JPL as an Open Portal

[Inside JPL](#) can be run as an open portal or as a customized portal. The

News & Announcements

Inside JPL Announcements

- [Changes to Access for Remote Portal Users](#)
2/24/03
- [Features for Registered Users](#)
- [Use Our Inside JPL News Group](#)

Data Channels

Data channels allow publishers to post content to Inside JPL. They are usually dynamic and specialized. Some of our publishers include

- The Daily Planet
- JPL Rules!
- the JPL Library
- [More information on channels](#)

Personalize Your Portal Page

To personalize your Inside JPL page, log in with your JPL Password. This

User Help and Support

More Information

Read the Portal Frequently Asked Questions

- [Questions about content](#)
- [Questions about personalization](#)
- [More user support](#)

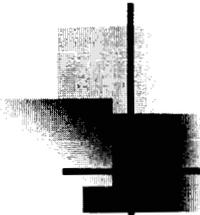
What If I Have a Problem?

You have some options:

- Use the **Remedy link** at the top of every page
- Email the [Inside JPL Webmasters](#)
- For password questions, call the Help Desk at 4-HELP.

Tell Us What You Think

We want to hear from you! E-mail us at



Customer Communication

- Build trust
 - Document all feedback and show your customers that you're doing it
- Dialogue - provide many ways for customers to talk to you and let them know you heard
- Support users with lots of online tutorials and help pages
- Train local subject matter experts
- Use direct contact as often as necessary
- Be visible – don't hide

Online Help Manual

INSIDE JPL DAILY PLANET JPL RULES! JPL PUBLIC HOME

 **Inside JPL**
a portal to the JPL intranet

Jet Propulsion Laboratory
California Institute of Technology

Search JPL
[Advanced Search](#) | [Hints](#)

Thursday, July 24, 2003 [Contact the Webmaster](#) [Report A Problem](#) | [Home](#) | [Help](#) | [Log Out](#)

Online Portal User Help Manual

[Inside JPL Portal Introduction](#)
[Manual Table of Contents](#)

[Using Your Portal Desktop Options](#)

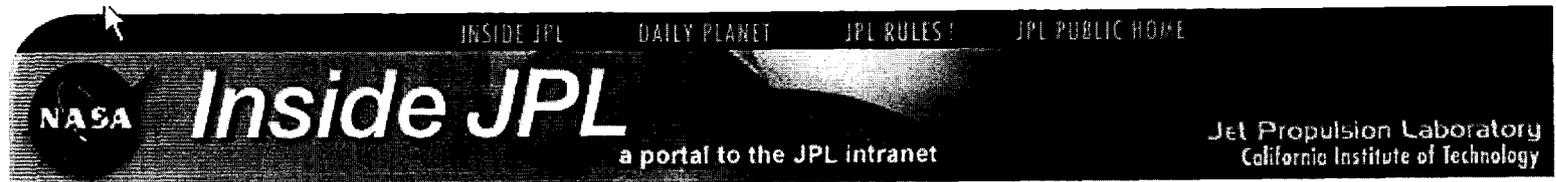
- [Home](#)
- [Content](#)
- [Layout](#)
- [Help](#)
- [Log Out](#)

[Using Channels](#)

- [Minimize](#)
- [Help](#)
- [Edit](#)
- [Remove](#)

[Channel Help](#)

- [Bookmarks](#)
- [Business Links](#)
- [Daily Planet](#)
- [Directory to JPL Web Space](#)
- [Earth and Space Sciences Division 32](#)
- [Engineering Links](#)
- [Find a Person](#)
- [Google Internet Search](#)
- [ICIS](#)
- [Industry News](#)
- [Institutional News](#)
- [JPL Library](#)
- [JPL Open Positions](#)
- [JPL Rules!](#)
- [Labwide Announcements](#)
- [Login](#)

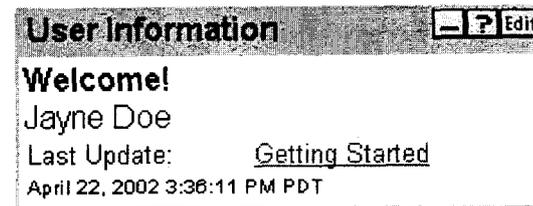


There's No Place Like Home - Getting Started With Inside JPL

Getting Started Page

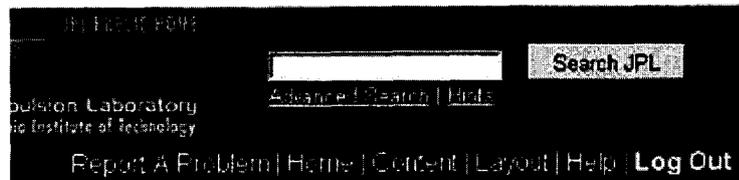
Customize Your Greeting

The **User Information channel** is at the top left column on your default desktop layout. Click on the **Edit button** at the top of the channel banner to enter your name and your personal greeting. Click the **Finished** button when you're done.



←
Edit Button

Personalize Your Portal Page



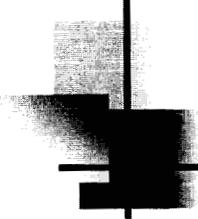
Content Menu Link
Choose which channels you'd like to see



Layout Menu Link
Personalize the display of your desktop

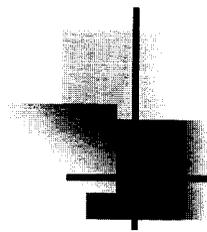
You can personalize your Inside JPL Desktop page by logging in to the server. Once you are a registered user, you can use the **Layout** and **Content** links on the top banner to choose which channels you'd like to see and how they are displayed.

Build Your Own Page!



When Customers Turn Ugly

- Trouble ticket form directly accessible from portal page
 - Track all tickets and close them promptly
- Allow venting and be polite
 - *What in the @#*! is this portal thingie?*
 - *Where's my ELIAS?*
- Allow mourning
 - Old habits die hard
 - Understand that you are dealing with culture change management



Transition – Or Rome Wasn't Built in a Day

- Provide an overlap period
- Let users know that the old site has a definite closure date
 - Post it on the old site – countdown to closure
 - Begin slowly nudging people over to the new site using links
 - Stop maintaining the old site
- Track usage and find out why individuals haven't moved over yet

Comparison Page

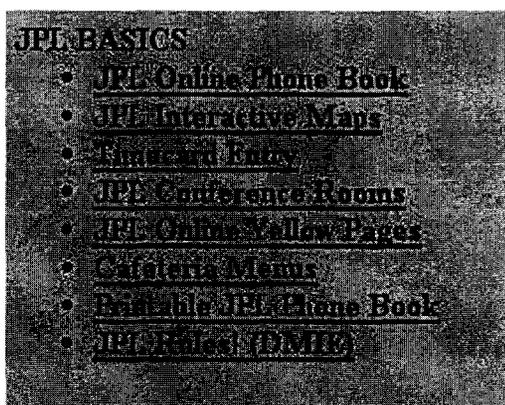
A SPECIAL NOTICE TO OUR CUSTOMERS

The ELIAS Web site has officially closed.

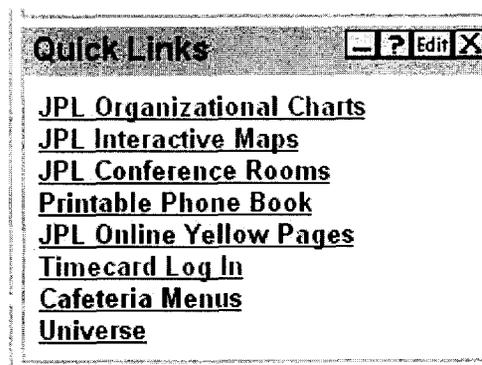
ELIAS and Inside JPL - A Side By Side Comparison

Inside JPL represents a new generation of portal technology for access to electronic information. Let's see where you can find your most trusted features from ELIAS on the new site.

ELIAS - JPL Basics

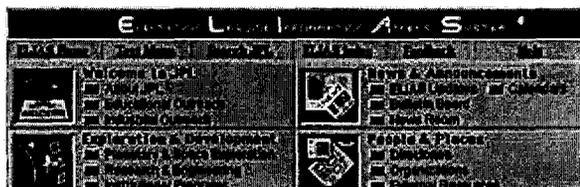


Inside JPL - Quick Links

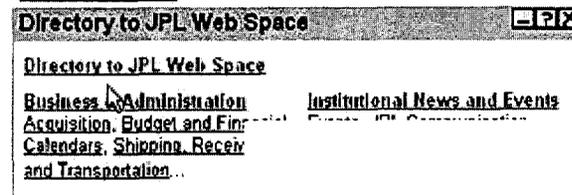


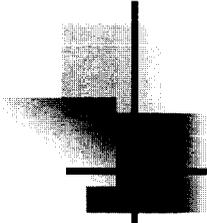
The new Quick Links: A handy list of the places on the JPL intranet you visit most often.

ELIAS - Directory Graphic



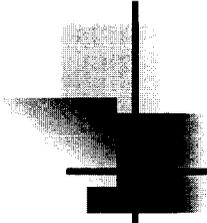
Inside JPL - JPL Web Space Directory





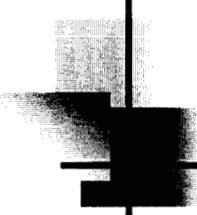
When The Big Day Comes

- Expect cranky customers
 - Be patient
- Reassure them by helping them with the new site
- Show them what's in it for them
- Use a redirect so folks aren't totally lost and disoriented



So What Happened In Our Case?

- No one knew what a portal was
- Simple explanations and descriptions repeated many times
- Lots of demos
- Many customers just used the open portal at first
- Showing them the benefits of logging in really helped



Grow Your Customer Loyalty

- Next steps based on customer input
- Go slow, but keep the vision
- Community based pages that encourage team communications on our space flight projects
 - Functionality includes instant messaging, e-mail, discussion forums, calendaring for groups, team channels
 - Can only get to them by logging in!