



Re-Engineered National Cruise System

Smokey Bear

U.S. Forest Service Mascot

Lincoln National Forest

Revised: 2014.12.30

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Why Re-Engineer?

- New technologies in the last decade
 - Better databases
 - Improved programming languages and tools
 - Field data recorder hardware
 - Field data recorder Operating System versions (Windows CE / Windows Mobile)



Why Re-Engineer?

- New Opportunities
 - Keep what worked
 - Re-design what didn't
 - Add new features that improve efficiency



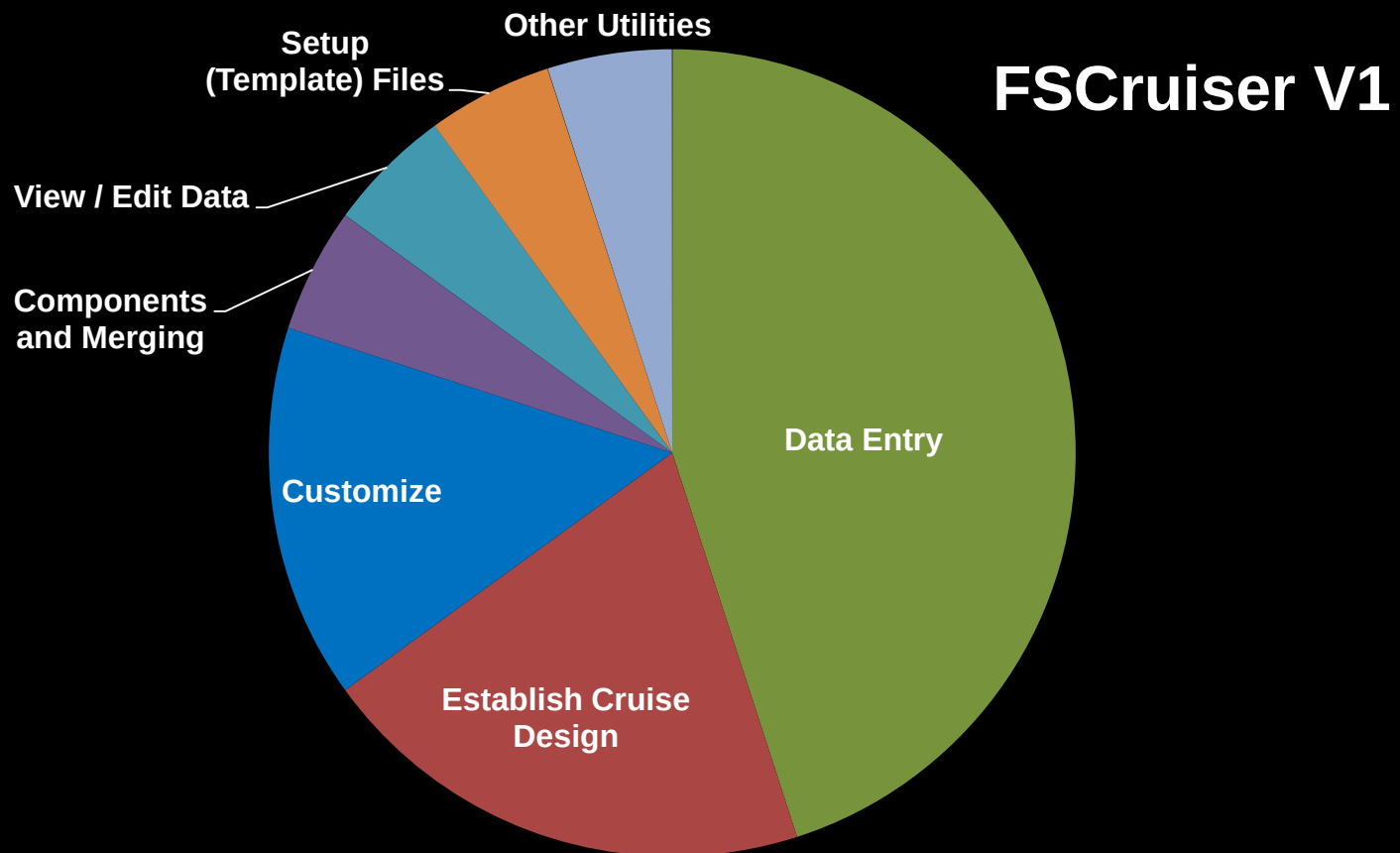
Mobile Devices Then and Now

Specification	2001	2014
<u>Processor Speed</u>	129 MHz	1,000,000 MHz
Memory	48 MB	512 MB
<u>Windows CE Version</u>	HPC Pro 2000	Windows Embedded 6.5
Display	640 x 240 256 color	800 x 480 HD
Battery	1,350 mAh	10,600 mAh
Wireless	no	Bluetooth, WiFi optional
GPS Receiver	no	optional
Other Accessories	none	Camera, scanner, etc.
Ingress Protection	IP65 (splash proof)	IP68 (immersion)





Then



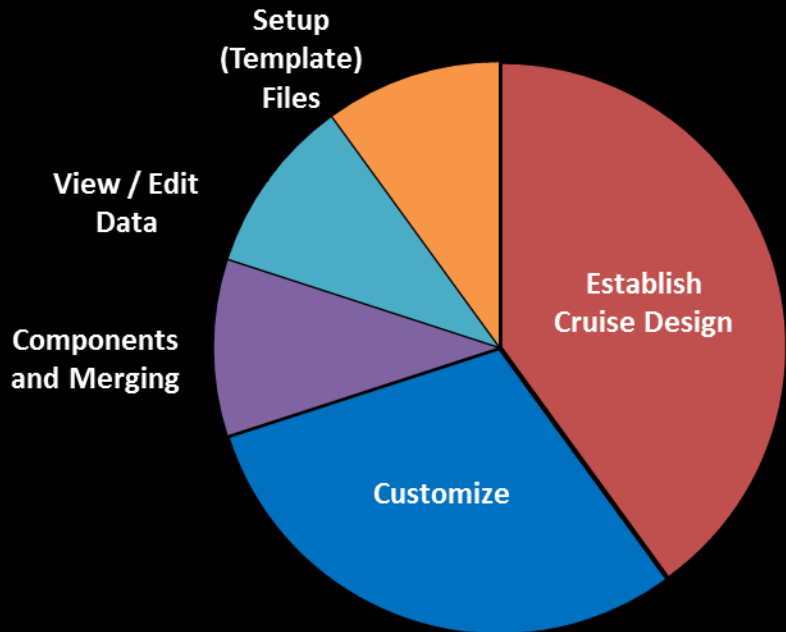
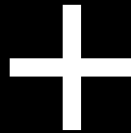
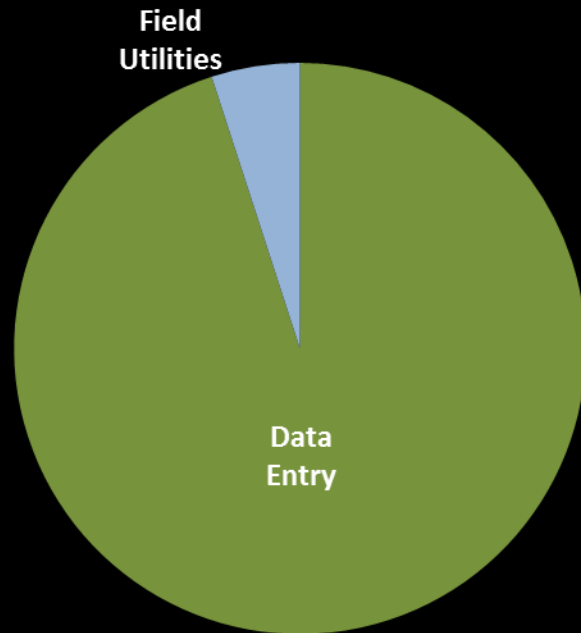
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Now

FSCruiser V2

Cruise Manager



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New FSCruiser

Keeps popular functionality:

- Customizable Data Entry Tables
- Field Data Audits
- Limiting Distance Calculator



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New FSCruiser

Improvements:

- Stable, reliable database
- Improved Sample Selection
 - Blocked and Systematic for Sample Tree (STR) 
 - Systematic for PCM and FCM 
 - Sampling state saved across populations
 - Insurance Tree tracking 
 - Untally feature 



New FSCruiser

- Improved sample selection (continued):
 - Multi-Strata tallying 
 - Real-time auditing 
 - 3P Sure To Measure 
 - Streamlined Cruiser's Initials 





New FSCruiser

- CE Versions vs. Data Recorders
 - *Settings > About: OS Version >= 4.2*
 - Compatible:
 - Allegro CX and newer
 - All Archers
 - Newer Trimbles
 - Itronix Q200
 - Too Old:
 - Allegro CE and older
 - Older Trimbles
 - Older Pocket PC (HP or Compaq iPAQs)
 - Itronix Q100

Up-to-date list on
the Web



New Cruise Design

- Importing statistics from historical cruises
- Insurance trees
- Recon to Production comparison
- Supplemental samples calculations
- Updated cruising costs
- Reports showing errors by value class

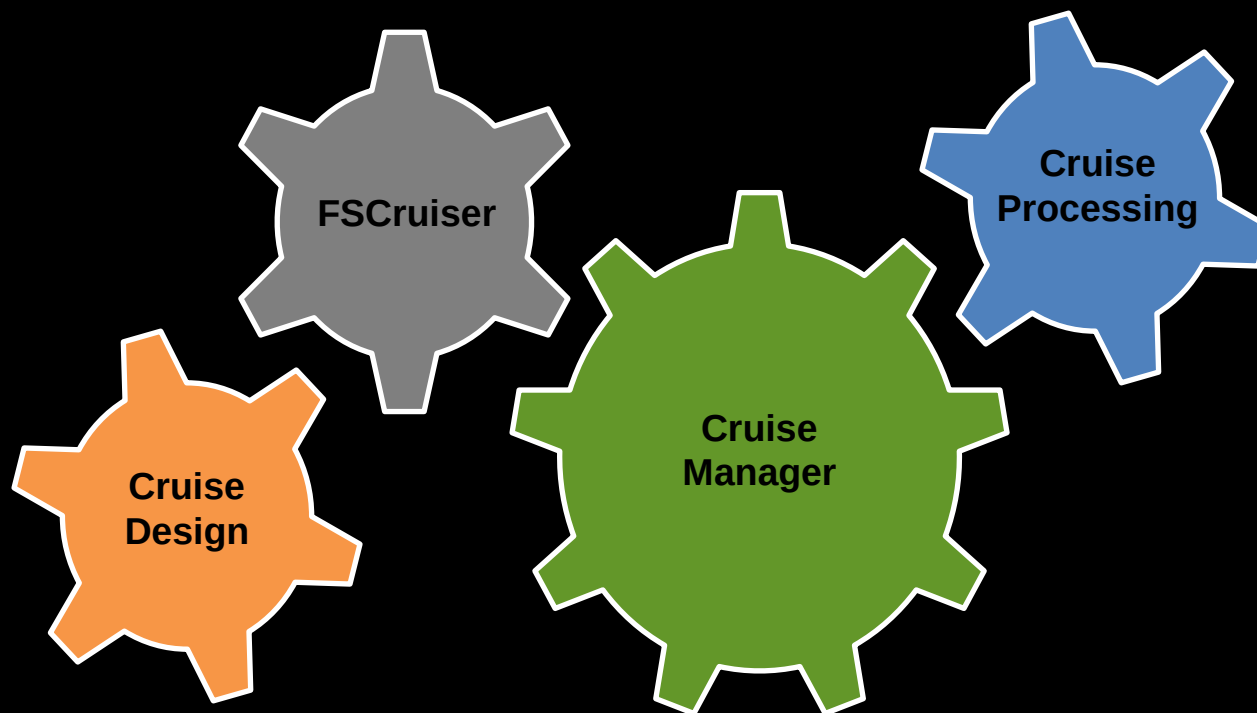


New Cruise Processing

- Biomass Library
- Ability to modify weight factors and merchandizing rules
- Create CSV files from select reports
- Report categories clarified
- Support for PDF and HTML output
- PDF file has optional watermark feature
- Graphical reports 



The New NCS Suite



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Questions?

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