





Lessons Learned in Building Enterprise and Desktop Applications with the NetBeans IDE

MAKE THE
FUTURE
JAVA

ORACLE®

Program Agenda

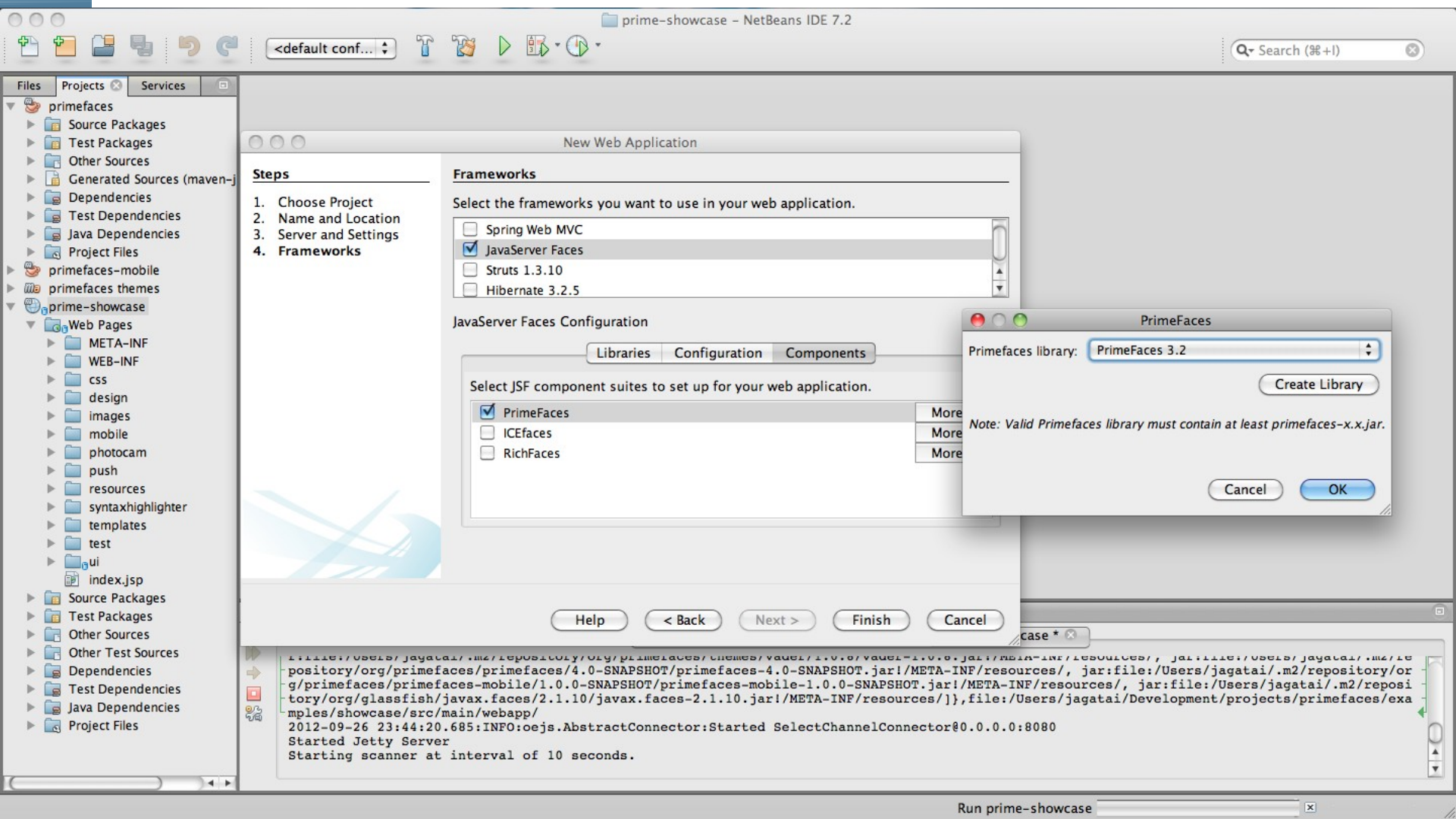
- Introduction
- Showcases
 - PrimeFaces
 - NATO Programming Centre
 - ORKA

Cagatay Civici (PrimeFaces)

- JavaServer Faces Expert Group Member
- Apache MyFaces PMC Member
- Speaker, Author, Reviewer, Consultant, Trainer
- Founder and Lead Developer of PrimeFaces

PrimeFaces

- JavaServer Faces Component Suite
- Open Source under Apache License
- 100+ Rich set of components
- Themes, Push, Mobile Addons
- Large and Active User Community



How Prime Team Uses NetBeans IDE

- Maven Integration with Customized Project Actions
- Java EE and JSF Tooling
 - Convert to Composite Component
 - Generate Forms and DataTable from Entities
 - EL Code Completion
 - Templating Features
- Testing
- Profiler
- Debugger

Angelo D'Agnano (NATO Programming Center)

- Worked in the Italian Air Force in Air Defence for 10 years
- Joined NATO Programming Centre in 2001
- Worked on several projects in the Air Defence field
- In 2008 appointed as Software Architect for the development of MICE

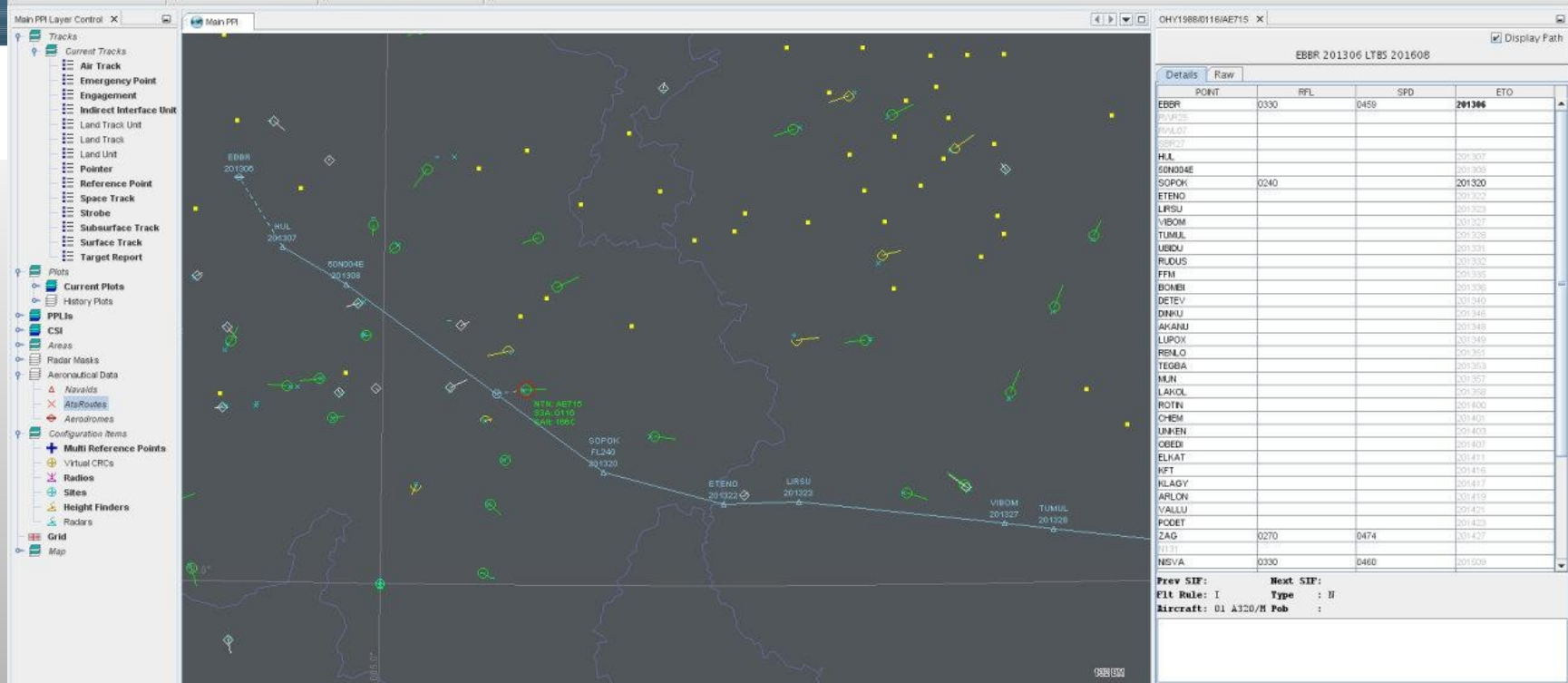


MICE

MICE (MASE Integrated Console Environment) is the platform at the heart of the newly developed MASE console. The MICE ambition is to be a rich-client platform for Air Defence Applications.

Developed using a framework allowing to support the SIL1 claim in accordance to the IEC 61508 standard.





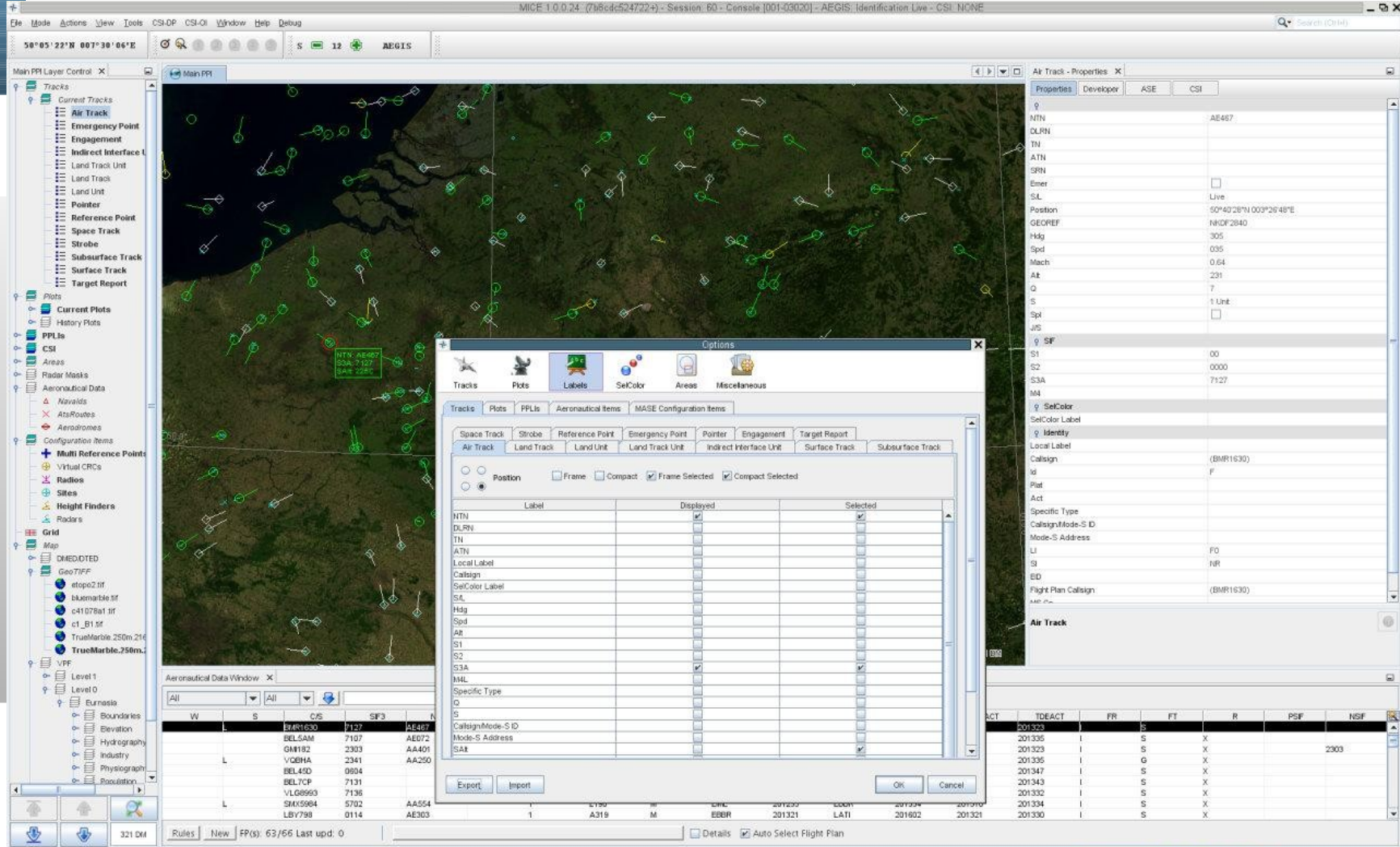
Aeronautical Data Window

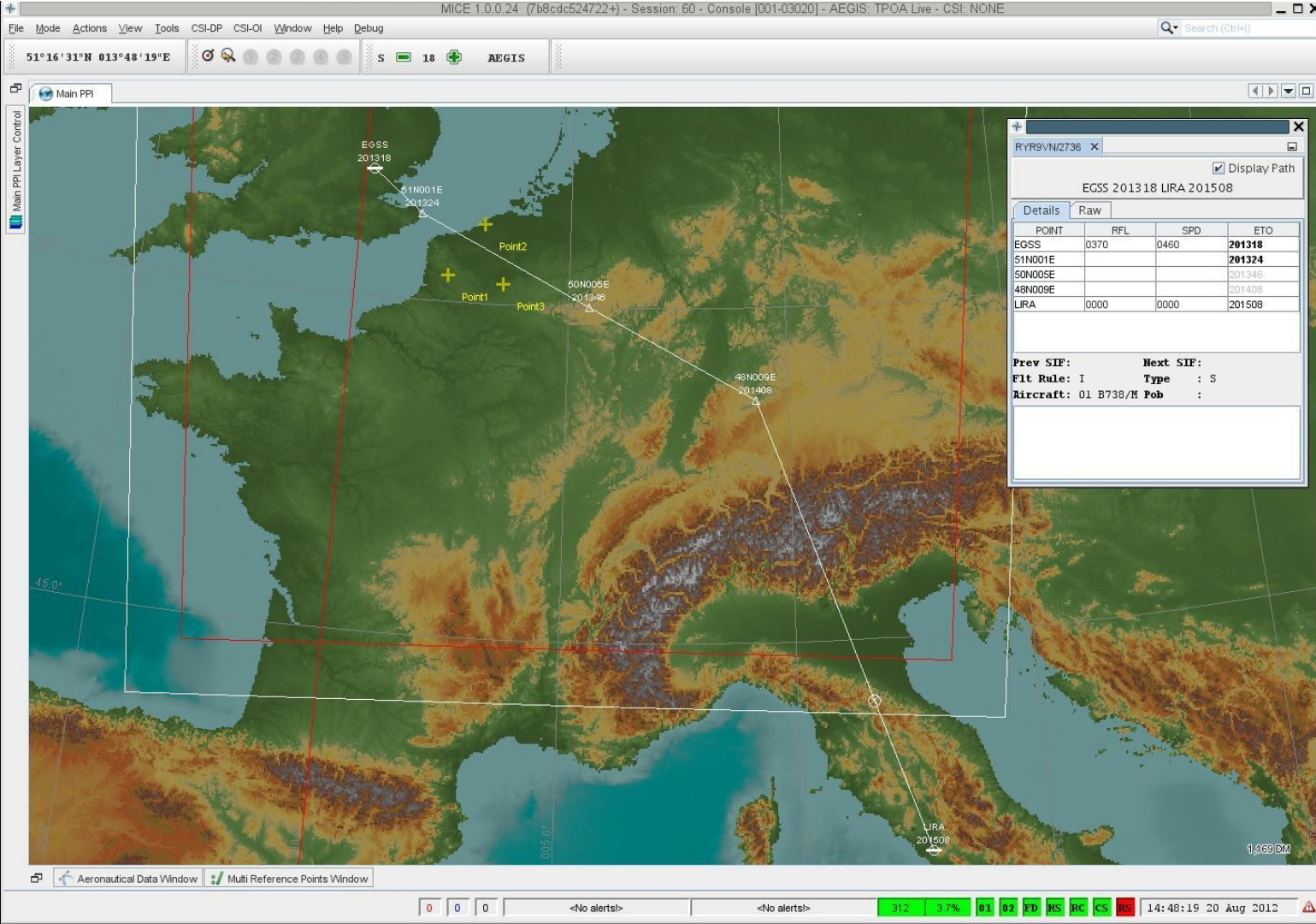
All

W	S	CS	SF3	NTN	ID	#	ARCTYP	VK	ADCP	ETD/ATD	ADCS	ETA/ATA	TACT	TDEACT	FR	FT	R	PSF	NSF
L		OHY198B	D116	AE715	F	1	A320	M	EBER	201306	LRSU	201308	201306	201324	I	S			
L		N1750G	6643	AA742	F	1	GLF3	M	CYQX	200838	BHRK	201350	201350		I	S			
L		VUZZ493	6630	AA463	F	1	A320	M	UNPR	201235	EGGW	201354	201314	201340	I	S			
L		AFR276	5641	AA076	F	1	A388	H	UPRG	201307	RJAA	202352	201319	201329	I	S	X		
L		DLH06E	5315	AA751	F	1	B733	M	LEPA	201156	EDOL	201343	201323		I	S	X		
L		RYR0457	5335	AA734	F	1	B738	M	LEB	201139	EBCI	201326	201324	201332	I	S	X		
L		MND743	4056	AA637	F	1	CSSA	L	UFLY	201246	BKKA	201421	201246		I	N	X		
L		RYR0099	3534	AE417	F	1	B738	M	BNRY	201213	EBCI	201334	201321	201334	I	S			
L		JAF9GX	0103	AE524	F	1	B738	M	EBCI	201305	LGAV	201544	201305	201321	I	S	X		

Rules New FP(s): 48/51 Last upd: 0

Details Auto Select Flight Plan





How MICE Benefits from NetBeans IDE

- Integration in Version Control (Mercurial)
- Automation of Unit Tests (JUnit, Cobertura)
- Static Code Analysis (CheckStyle, PMD, FindBugs)
- Connection to Issue tracking (Bugzilla) / Continuous Integration (Jenkins) Servers
- CPU and Memory profiling
- Powerful debugger
- Showcase of NetBeans Platform functionality

Gerrick Bivins (Landmark/Halliburton)

- Aero E BS, ME MS
- Engineering Animations Inc. 1998
- CAD visualization
- NURBS
- Scientific Visualization (primarily Computational Fluid Dynamics data)
- Virtual Reality Applications Center @ Iowa State University
- R&D 100 Award Winner 2006
- Joined Object Reservoir in 2007, acquired by Landmark (Halliburton) 2011

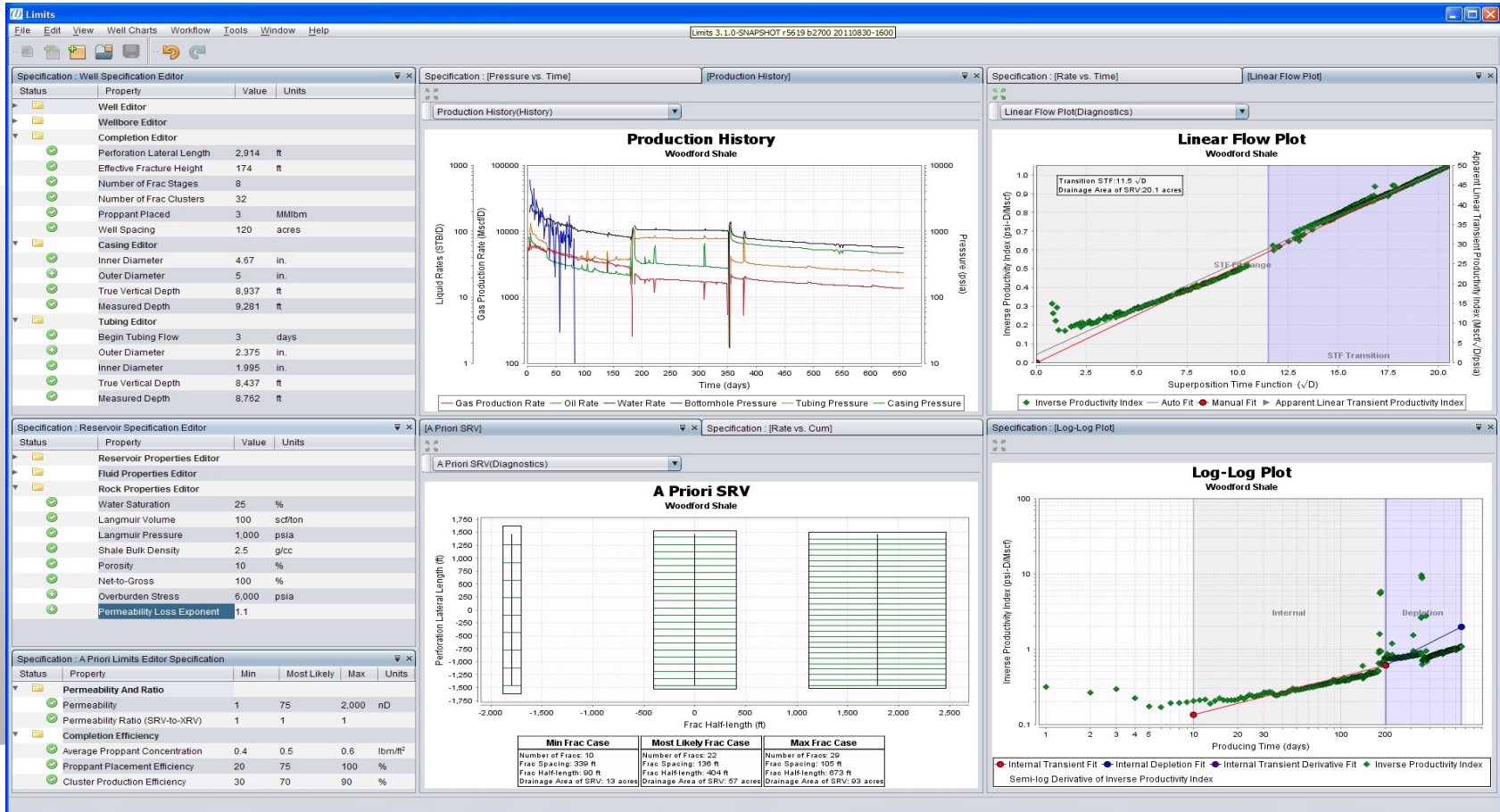
What is ORKA?

- Object Reservoir Knowledge Architecture
- Modular platform for developing O&G applications based off of the NetBeans Platform

What is Limits?

- Reservoir Engineering tool for Shale Gas and Unconventional Reservoirs
- Not so successful implementations
 - Derived in spreadsheet!!! (Not “commercial-izable”)
 - Adobe Flex/RDF (Not practical, not enough time)
 - Swing/Apache Derby (Successful but not scalable for dev team)
- First successful application delivered on the ORKA platform





Why NetBeans IDE?

- Development tool(s) integration: Maven!, Svn/Git, JUnit
- Refactoring Tools (Monolithic -> Modular)
- Code Generation (Beans especially)
- Relatively low bar for small team (5) of relatively New Java/Swing Developers (3 of 5)
- Straightforward developer concepts (Projects, Files, Editors)

