

Промышленные партнеры и практики студентов

Промышленные партнеры



- Научно-производственная корпорация «Космические системы мониторинга, информационно-управляющие и электромеханические комплексы» имени А. Г. Иосифьяна



- Институт радиотехники и электроники им. В. А. Котельникова Российской академии наук



В СОСТАВЕ ОАК
КОРПОРАЦИЯ ИРКУТ

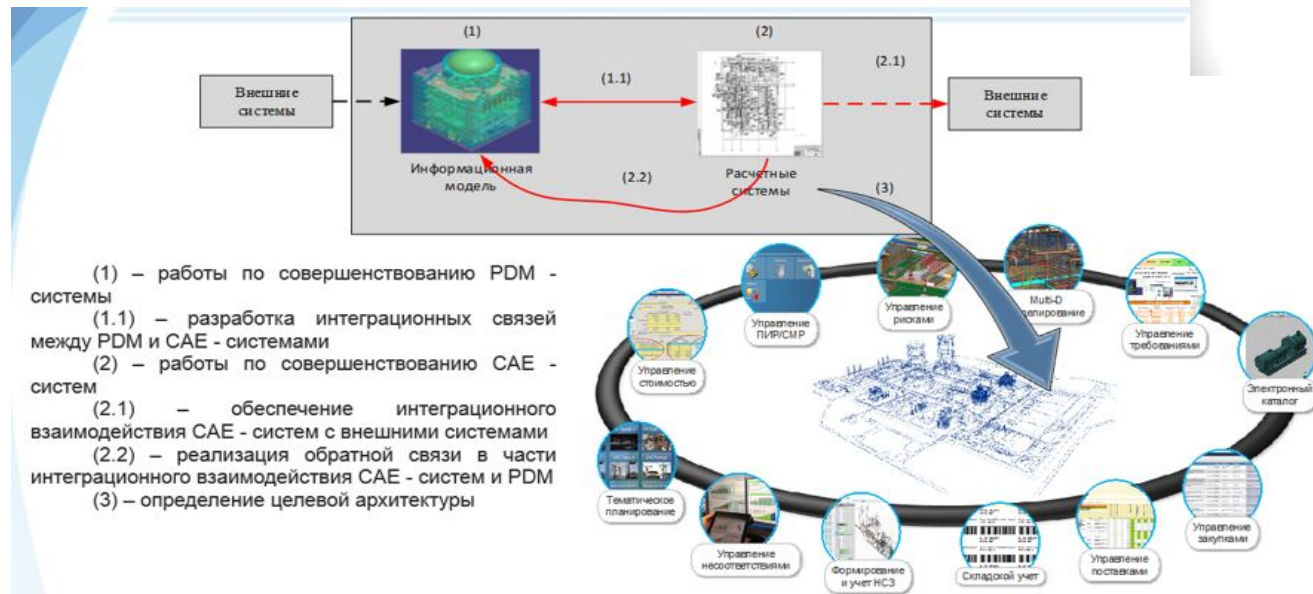


Федеральная Инжиниринговая Сеть
MT-TEKHO

- Федеральная инжиниринговая сеть MT-Техно

Кейсы для практических занятий

Инструменты управления жизненным циклом



Кейсы для практических занятий

Управление проектами и рисками

ARIS Audit Manager - Microsoft Internet Explorer

Address: http://b1092:8000/aam/aam.jsp

ARIS Audit Manager 3.0 Demo version

You are logged in as Андрей Коптелов (59 minutes remaining)

Home » Test cases 'Not effective'

Group in charge: All

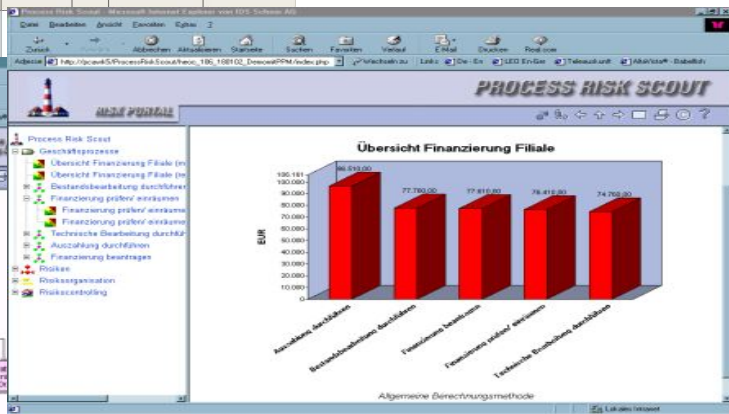
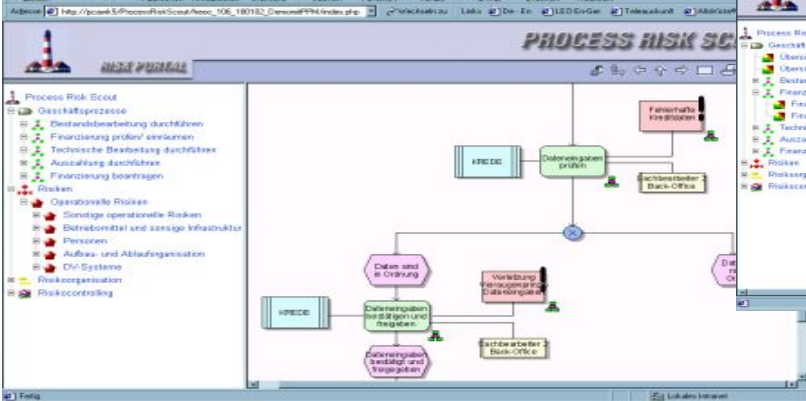
Deficiency: Unspecified

Test status: Control not effective

Testing period: from 1/1/07 to 7/25/07

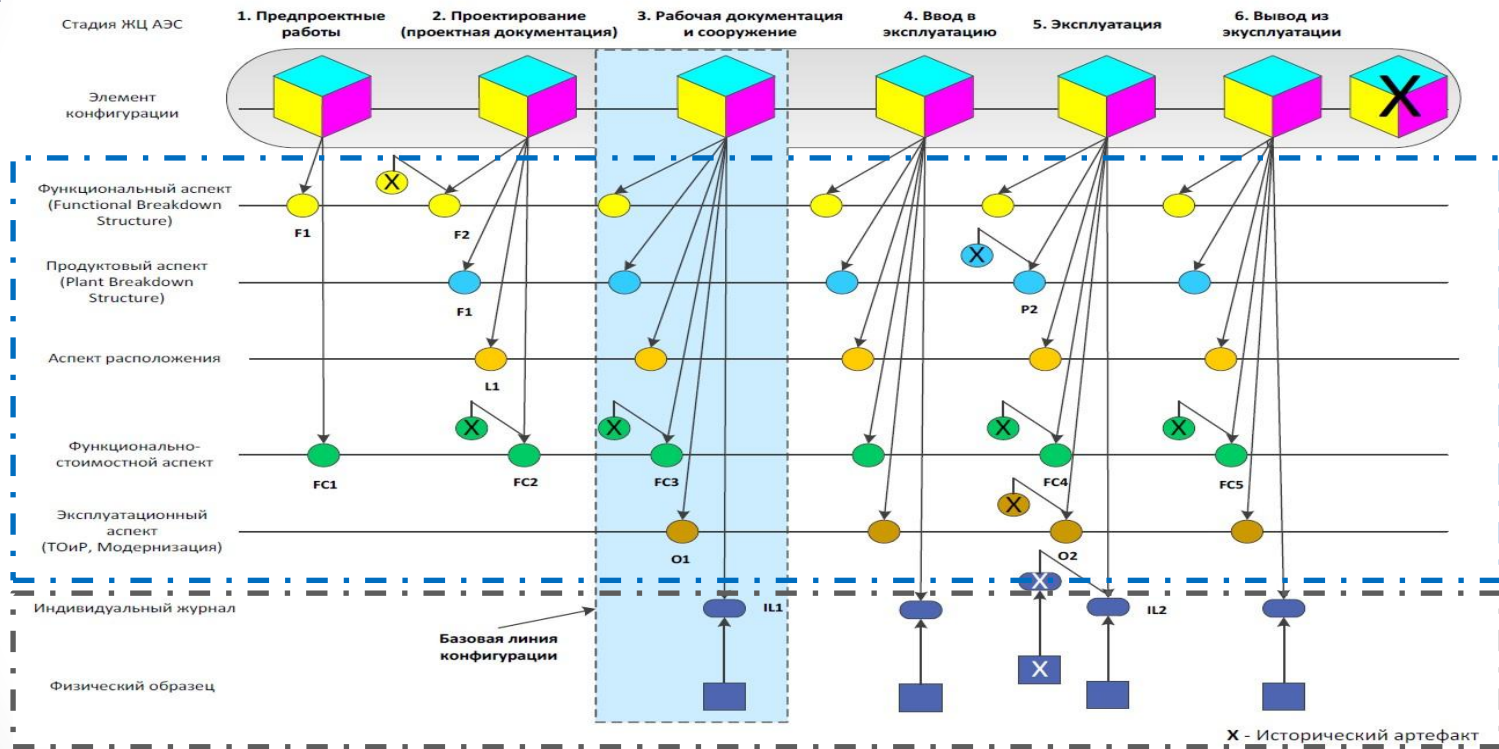
Test case: 1215

Test case	Client	Group in charge	Tester hierarchy	Performed by	Test date	Testing period Beginning	Testing period End	Result	Deficiency	Type	Function	Risk name
1215	000	Группа тестеров 3.01	Тестеры	Храповская Светлана	7/25/07	7/24/07	8/12/07	✗				



Кейсы для практических занятий

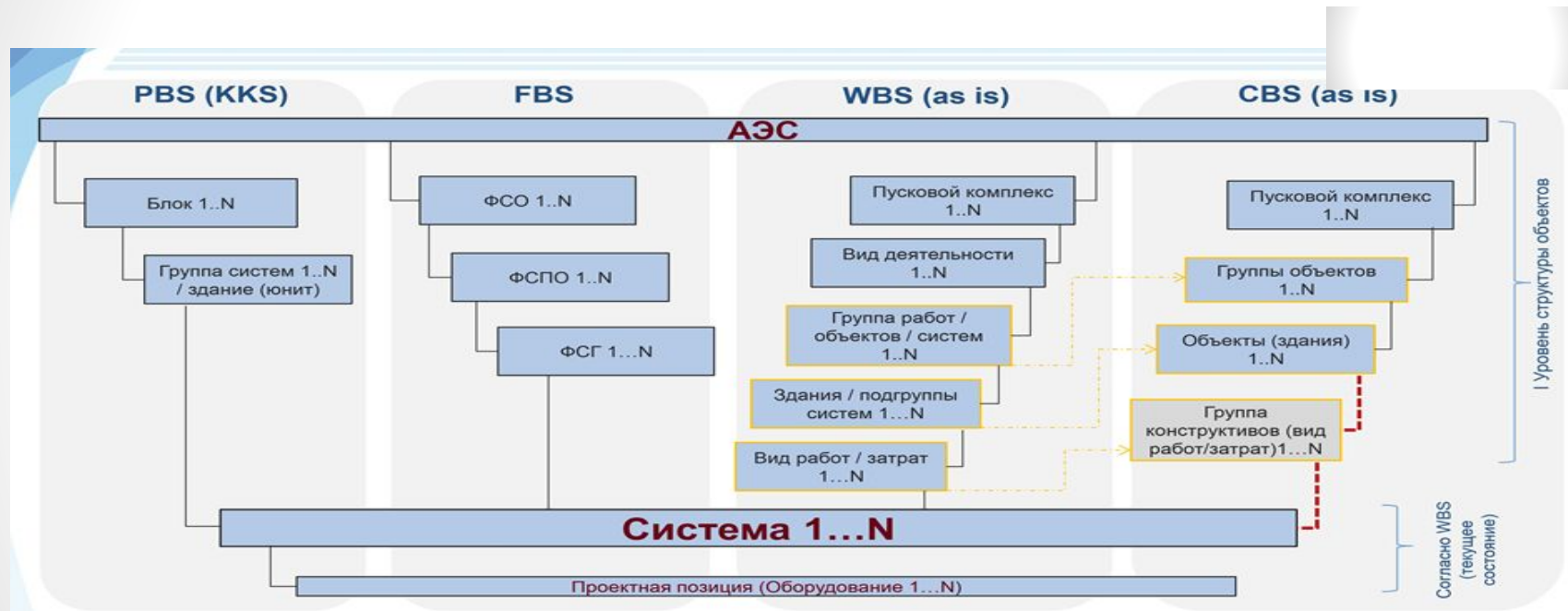
Управление конфигурацией



На основе IEC 81346  - элементы конфигурации  - информационные элементы конфигурации

Кейсы для практических занятий

Управление жизненным циклом системы



Кейсы для практических занятий

Построение системных моделей

Model Hierarchy

- Test Cases
- Requirements
- «ModelLibrary» Satellite Constraints
- «ModelLibrary» Value Types
- Behavior
 - Manufacturing Use Cases
 - Launch Use Cases
- Structure
 - AOCS

par [Block] Transfer Time Analysis [Constraint Parameter - Value Property Bindings]

- earth : Gravitational Body [1]
 - gravitationalParameter : km^3/s^2
- systemOfInterest : DellSat-77 Satellite [1]
 - aocs : Attitude and Orbit Control Subsystem [1]
 - currentOrbitRadius : km
- ht : Hohmann Transfer [1]
 - timeOfFlight : s
 - initialOrbitRadius : km
 - finalOrbitRadius : km

Criteria

#	Имя	Id	Text	Satisfied By
1	Altmetry	D-F-2	The satellite shall autonomously measure its altitude at intervals of 500 ms or less with an accuracy of 1 km or better.	Microcosm Autonomous Nav...
2	DellSat-77 System Requirements Specification	P-F-3		
3	Hohmann Transfer	P-F-1	The DellSat-77 satellite shall execute a Hohmann Transfer to maneuver from its parking orbit to its final orbit.	DellSat-77 Satellite
4	Mission Requirements Specification	2		
5	Propulsion Subsystem Requirements Specification	D-F-4		
6	Sensor Payload Requirements Specification	D-F-5		
7	System Availability	P-NF-2	The system shall have an availability greater than or equal to 0.999.	DellSat-77 Satellite
8	System MTTF	P-NF-1	The system shall have a mean-time-to-failure (MTTF) greater than or equal to 4,400 hours.	DellSat-77 Satellite
9	Thruster Burn	D-F-1	The propulsion subsystem shall fire thrusters continuously for a minimum duration of 2 minutes and a maximum duration of 5 minutes.	Propulsion Subsystem

uc [Flavor [Package]] Operations Use Cases [Multiplicities on associations]

```

sequenceDiagram
    actor RadarOperator as Radar Operator
    participant Satellite as DellSat-77 Satellite
    participant Radar as «actors» Ground Station Radar

    RadarOperator-->>Satellite: 1..2
    Satellite-->>Radar: 0..*
    Radar-->>Satellite: 1..*
    
```

TEAMCENTER

PLM PLATFORM



Start



Designs



Documents



BOMs



Process



Extend



Requirements



Service



Manufacturing



Supplier



Transform



Quality



Cost



Sustainability



Systems

Apps

[1] "Fit data?": Value Change

Pass the number of X and Y points and the 3D Surface Graph reference to the model function so that intermediate results can be seen "live" on the front panel.

3D Surface Graph

LabVIEW 3D Graph

num X samples

num Y samples

This is a reference to the VI that implements the model function.



Parameters

[DBL]

noise sigma

[DBL]

Generate sample data.

GEN 2D GAUSS

EST 2D GAUSS

Lev-Mar: VI

Calculate initial guess.

1000
1E-8

GRPH2D GAUSS

Graph the best fit.



#function calls

[I32]

Best Fits

[DBL]

residue

[DBL]

Display the results.

OldVal

3D Surface Graph

[DBJ]

Tab Control

[<>]

Fit data?

[TF]

Fit the data with the **Nonlinear Curve Fit VI**.

Кейсы для практических занятий

Проектирование комплексных систем



Кейсы для практических занятий

Моделирование испытаний системы

