

# Pharo 70

## The key challenges

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# Points

- Cleaning and stabilising
- 64 bits windows/large images
- Iceberg in production
- Pharo managed on github
- Bootstrap in production
- Retirement of Nautilus -> Calypso + Commander
- New class definition
- Cargo

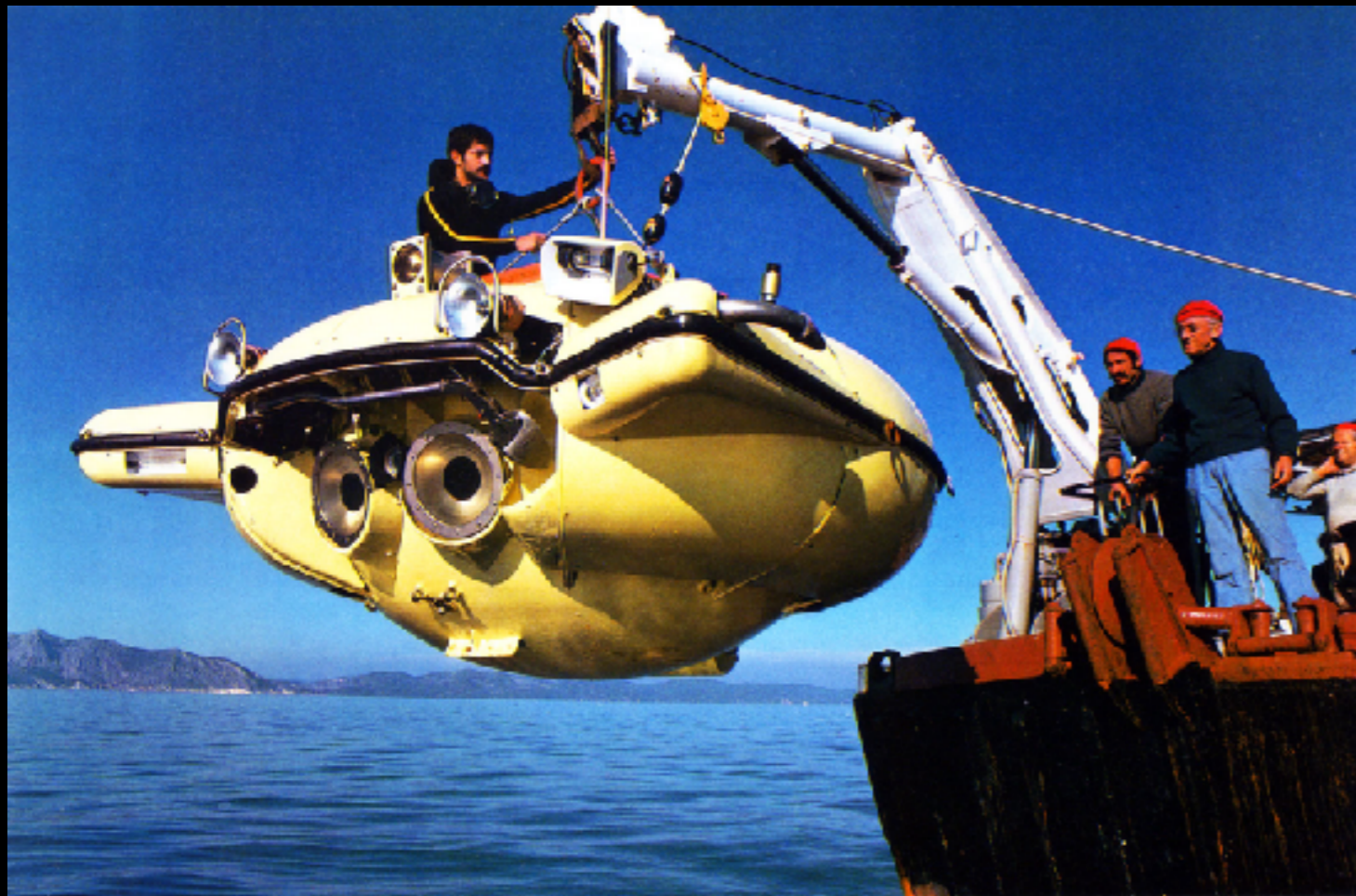
# Nautilus



# Calypso



# Calypso & its submarines



# Calypso

- Basis for Remote Browsing
- Fully extensible
- No ifs
- Developed by D. Kudriashov
- Thanks alain for giving us the name

# Calypso

- multiple panes
- multiple method definitions
- incomplete method definitions
- scoping...

AbstractConfiguration>>propertyAt:ifAbsent:

- SimpleConfiguration
- BrainstormConfiguration
- Errors
- Junk
- OldPillar
- Test

- AbstractConfiguration
- CCSimpleConfiguration
- CCSimpleConfigurationMock
- SCConfiguration
- CCSimpleSTONConfigurationInterp

- inherited methods
- as yet unclassified
- accessing
- accessing - properties
- copying
- error signalling
- initialization
- logging
- printing
- private
- reflective operations
- subconfigurations
- testing
- overridden

- allProperties
- propertyAt:
- propertyAt:ifAbsent:
- propertyAt:ifAbsentPut:
- propertyAt:ifPresent:ifAbsent:
- propertyAt:put:

Simple Filter...

Packages
  Projects
 |  Flat
  Hier.
 |  Inst. side
  Class side
 |  Methods
  Vars
 | [Class refs.](#)
[Implementors](#)
[Senders](#)

Comment
\*AbstractConfigur
propertyAt:ifAbse

```

propertyAt: aKey ifAbsent: aBlock
    "Answer the value of the property ==aKey==, potentially looking in parents, or the result of
    ==aBlock== if the property doesn't exist."

    ^ properties
      at: aKey asSymbol
      ifAbsent: [ self hasParent
                  ifTrue: [ self parent propertyAt: aKey ifAbsent: aBlock ]
                  ifFalse: aBlock ]
    
```

1/9 [1] Format as you read W +L

Updating critiques...



# New Message Browser

The screenshot shows an IDE window titled "Implementors of subConfigurationNamed: [2]". The window displays a list of implementors for the message `subConfigurationNamed:`. The list includes `AbstractConfiguration` and `SCConfiguration`, both of which implement the message by returning `SimpleConfiguration`.

Implementor	Message	Implementation
AbstractConfiguration	subConfigurationNamed:	SimpleConfiguration
SCConfiguration	subConfigurationNamed:	SimpleConfiguration

Below the list, there is a "Filter..." input field and a navigation bar with options: Flat, Hier., Current image, SimpleConfiguration, SCConfiguration, Class refs., Implementors, Senders.

The main editor area shows the implementation of the `subConfigurationNamed: aString` message in a class. The implementation is as follows:

```
subConfigurationNamed: aString
    "T return a configuration of the name 'aString'. If this configuration doesn't exist, I raise an error."

    ^ self configurations
      at: aString
      ifAbsent: [
        self configurations do: [ :conf | (conf subConfigurationNamed: aString) ifNotNil: [ :subsub | ^ subsub ] ].
        self error: 'No configuration named "' , aString , '"' ]
```

The status bar at the bottom indicates "7/10 [44] - 7/10 [66]" and "Updating critiques..."

# Iceberg



- Paid by the consortium
- libgit2

Iceberg repositories

Repositories ☀ New repository + Clone repository + Add local repository ↶ Fetch all

Name	Current branch	Loaded version	Status
iceberg	dev-0.4	fefadb2 (9:40:15 am)	Up to date
libgit2-pharo-bindings	development	2a86f76 (19 April 2017)	Up to date
themes	master	1cb8ba9 (8 May 2017)	Up to date
* pharo	master	e9d735b (11 May 2017)	Uncommitted changes
TestToDelete	master	03bd70e (11 May 2017)	1 not published

General Packages Remotes Branches

Name	Value
Origin	git@github.com:pharo-vcs/iceberg.git
Remote User	
Remote host	github.com
Repo Owner	pharo-vcs
Location	/Users/esteban/Dev/Pharo/xx/pharo-local/iceberg/pharo-vcs/iceberg
Pulling from	origin
Pushing to	origin

# Iceberg

- Potentially for

- Fossil



- Mercurial





**Bitbucket**



**github**  
SOCIAL CODING



**GitLab**

# Pharo on github



**github**  
SOCIAL CODING

# About classes

# Class definition explosion

- subclass:, variableSubclass:, variableByte.. variableWord, weak:
- uses:
- layout:
- tag:
- immediate:, ephemeron
- category:
- package:
- slot:
- instanceVariableNames:, classVariableNames:

# Need a fluid API

- Only specify what is used!
- No empty classVariableNames: “
- Handling combinatorial explosion

```
Class <<< #Box  
  vars: { #width . #height };  
  package: #MyPackage.
```



# Possible Designs

```
Class {  
  superclass: #MySuperclass;  
  uses: #MyTrait;  
  vars: { #a. #b };  
  classVars: { #A. #B };  
  package: #MyPackage;  
  tags: #(Core).  
}
```

```
Class <<< #MyClass  
  superclass: #MySuperclas;  
  uses: #MyTrait;  
  vars: { #a. #b };  
  classVars: { #A. #B };  
  package: #MyPackage;  
  tags: #(Core)
```

# Need a class `**definition**`

- a.k.a. AST
  - traits, slots, kinds.....
- Can be manipulated
- Support for Smart Suggestions
- Need to be able to have `**undefined**` classes
- Important for modules!

# Working on a “ClassParser” + Nodes

- Can handle variations, backward compatibles....
- Support for smart suggestion in class definition
- Avoid ‘\*subclass:\*’ matches: str

# Opal

- Warnings into real objects
- Another pass on the API

# PharoPro

More services around the consortium

- Long Term Support (LTS)
- Platform Support: CentOS, NetBSD, FreeBSD
- Pharo Hotline
- Custom Development

# Pharo 70 is exciting

We are excited by the possibilities

You can help, contribute and have fun with us