

Le développement logiciel Agile

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Le monde Agile

Scrum
Crystal
Extreme Programming

The diagram features a large rounded rectangle at the top containing the names of agile frameworks: 'Scrum', 'Crystal', and 'Extreme Programming'. 'Extreme Programming' is underlined. A vertical line descends from the right side of this rectangle, ending in an arrowhead that points to the right, specifically towards the list of characteristics below.

Livraisons fréquentes

Tests automatisés

Conception incrémentale

Travail collaboratif

Contexte initial

The screenshot displays the ILOG JT60 software interface, which is used for network management and monitoring. The main window shows a geographical map of Europe with a network overlay. A central Mobile Switching Center (MSC) is highlighted with a black circle. Other network elements like Base Station Subsystems (BSS), Transcoder Units (TCU), and Base Transceiver Stations (BTS) are also visible on the map.

On the left side, there is a tree view showing the network hierarchy: Customer1, SLA3, Service5, NetB, NS2, and several cards (Card 5, Card 6, Card 7). Below this is an "Alarm Table" with the following data:

Object	Severity	Trend	Ack	ProbableCaus
Mux0	Cleared	Green arrow	Checked	Power problem
Mux0	Warning	Yellow arrow	Unchecked	Loss of multiple frame
Mux0	Minor	Green arrow	Checked	Synchronization source
Mux0	Minor	Green arrow	Checked	Equipment identifier du
Mux1	Warning	Yellow arrow	Unchecked	Data set problem
Mux1	Major	Red arrow	Unchecked	Line card problem
Mux1	Warning	Yellow arrow	Checked	Replaceable unit proble
Mux1	Indeterminate	White arrow	Checked	Replaceable unit proble
Mux1	Major	Red arrow	Unchecked	Replaceable unit missi
Mux1	Minor	Green arrow	Checked	Equipment identifier du
Mux2	Critical	Red arrow	Unchecked	Multiplexer problem
Mux2	Minor	Green arrow	Checked	Loss of signal
Mux2	Critical	Red arrow	Unchecked	Reserved for communic
Mux2	Major	Red arrow	Unchecked	Trunk card problem
Mux3	Warning	Yellow arrow	Unchecked	Replaceable unit proble
Mux3	Critical	Red arrow	Unchecked	Replaceable unit missi
Mux3	Major	Red arrow	Unchecked	Equipment identifier du
Mux3	Indeterminate	White arrow	Unchecked	Multiplexer problem
Mux4	Minor	Green arrow	Checked	Loss of signal
Mux4	Warning	Yellow arrow	Checked	Reserved for communic
Mux4	Minor	Green arrow	Checked	Trunk card problem
Mux4	Cleared	Green arrow	Checked	Replaceable unit proble
Mux4	Warning	Yellow arrow	Unchecked	Replaceable unit proble
Mux4	Warning	Yellow arrow	Unchecked	Replaceable unit missi

At the bottom left, a property window for "illog.tgo.model.INShelf" is open, showing the following details:

Property	Value
LogicalFirstIndex	0
Name	Shelf
SlotNumSpace	1
SlotNumbersOnTop	False

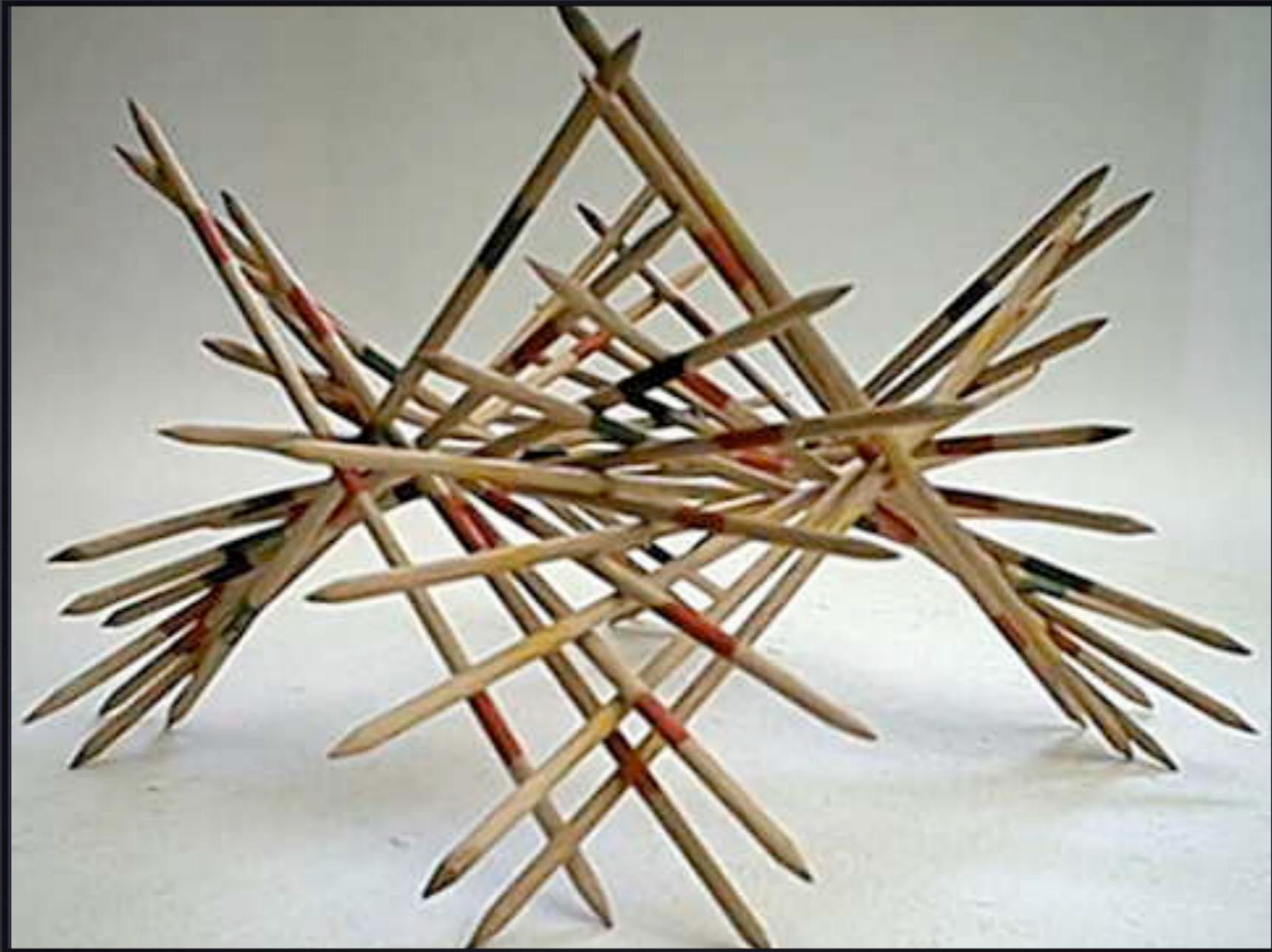
On the right side, there is a detailed view of a network equipment shelf. It shows several slots, with slot 1 containing a card labeled "1C" and slot 4 containing a card labeled "4C". Below this, another view shows a close-up of a network interface with ISDN ports (1W, 1M+) and other connectors.



“Tous les indicateurs sont au vert...”



“Nous finissons la phase de test...”



“Cette évolution n’est pas facile...”



“C’est un système complexe...”



“Aïe, le développeur IHM veut partir...”

Projet 1

Télécoms

Serveur de communication haute disponibilité / haute performance pour
la supervision d'équipements télécoms

3-5 développeurs / 9 mois => 40 hommes/mois

Problèmes	Actions	Résultats
Evolutions fonctionnelles trop coûteuses	Itérations de 2 semaines 200 tests automatiques Conception incrémentale Travail collaboratif	Délais tenus 12 défauts en intégration

Projet 2

Télécoms

Outil de configuration de réseaux de téléphonie mobile 3G

3 à 25 développeurs en 2 équipes => 4 ans, 1000 hommes/mois

Problèmes	Actions	Résultats
<p>> 80% maintenance corrective</p> <p>> 460 défauts en attente</p> <p>Produit non vendu</p>	<p>Itérations de 2 semaines</p> <p>20.000 tests automatiques</p> <p>Conception incrémentale</p> <p>Travail collaboratif</p>	<p>“Best in class”</p> <p>Délais tenus</p> <p>< 10% maintenance corrective</p> <p>Plateforme générique</p>

Projet 3

Finance

Progiciel de calcul de performance de portefeuilles boursiers

Problèmes	Actions	Résultats
<p>> 150 défauts en attente</p> <p>2 mois de retard sur livraison</p> <p>Turnover</p>	<p>Itérations de 1 semaine</p> <p>Tests automatiques</p> <p>Conception incrémentale</p> <p>Travail collaboratif</p>	<p>“Amélioration radicale”</p> <p>< 10% maintenance corrective</p> <p>Logiciel maîtrisé</p>

Bilan

Réduction du nombre de défauts

Meilleures interactions avec les clients

Code plus évolutif

Equipes cohésives

Un changement profond

Cycles longs



Livraisons fréquentes

Tests manuels



Automatisation des tests

Conception initiale



Conception incrémentale

Equipe "modulaire"



Travail collaboratif

“No Silver Bullet”

Planification aléatoire

Lourdeur des tests

Code insuffisamment maîtrisé

Problèmes humains

Agile



Lean

En savoir plus



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