

- Main office in Bucharest
- Offices in Braşov and Oradea



- 26 years experience in PLM
- \$2,3 M revenue
- 24 employees
- 1500 SPLM licenses
- 150 customers
- 20 academic training centres
- PLM Implementations Market Leader

IBM

Atos

Solution
Partner

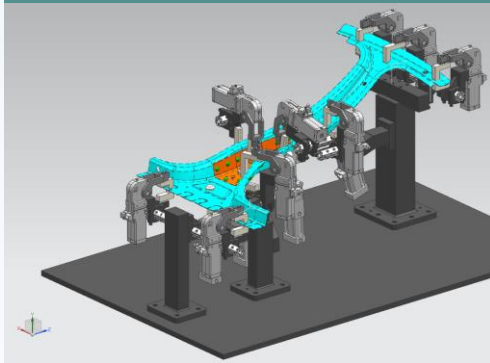
PLM

SIEMENS

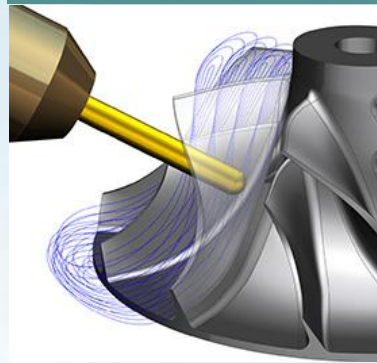


Solutions for Integrated Development

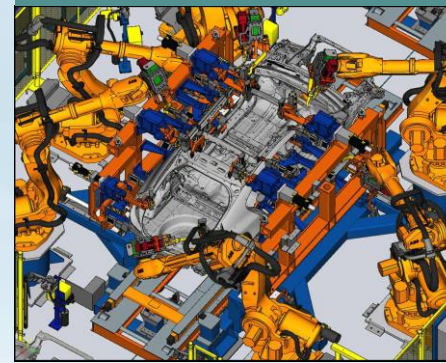
2D/3D design



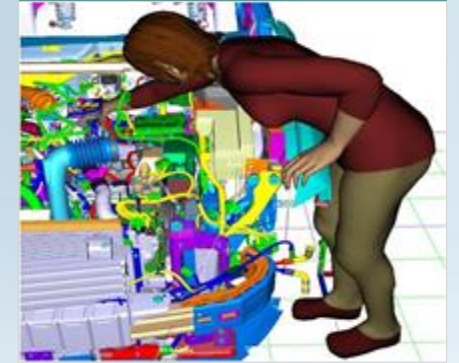
5-axis CAM



BiW projects



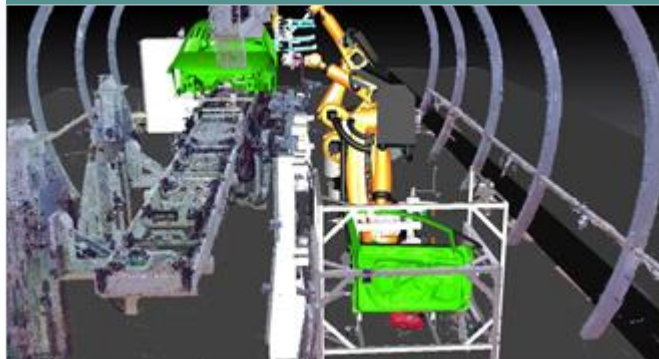
Human simulation



Robcad to Process Simulate



Point-Cloud alignment



Virtual Commissioning





JAGUAR
LAND-ROVER

L462, L405, L551, X760, X260



Audi

4K5, 4K9, 4KD



FIAT

X1H, X6S



BMW

G01



Ford

B232, B515



Renault

HJD



DAIMLER

C118, N293, W489

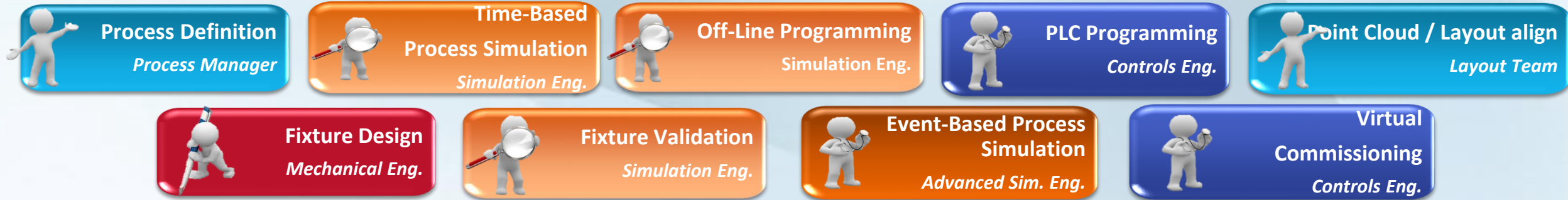
Supplier for Tier1 Line Builders

Services, trainings and consultancy

- ✓ Sweden
- ✓ Germany
- ✓ Belgium
- ✓ Holland
- ✓ Croatia
- ✓ Slovenia
- ✓ Romania
- ✓ Turkey
- ✓ China
- ❖ Norway
- Singapore, Malaysia - 2018
- India – 2018



ADA Digital Manufacturing Team



NX

TECNOMATIX

TEAMCENTER

Etapele implementarii unei linii robotizate



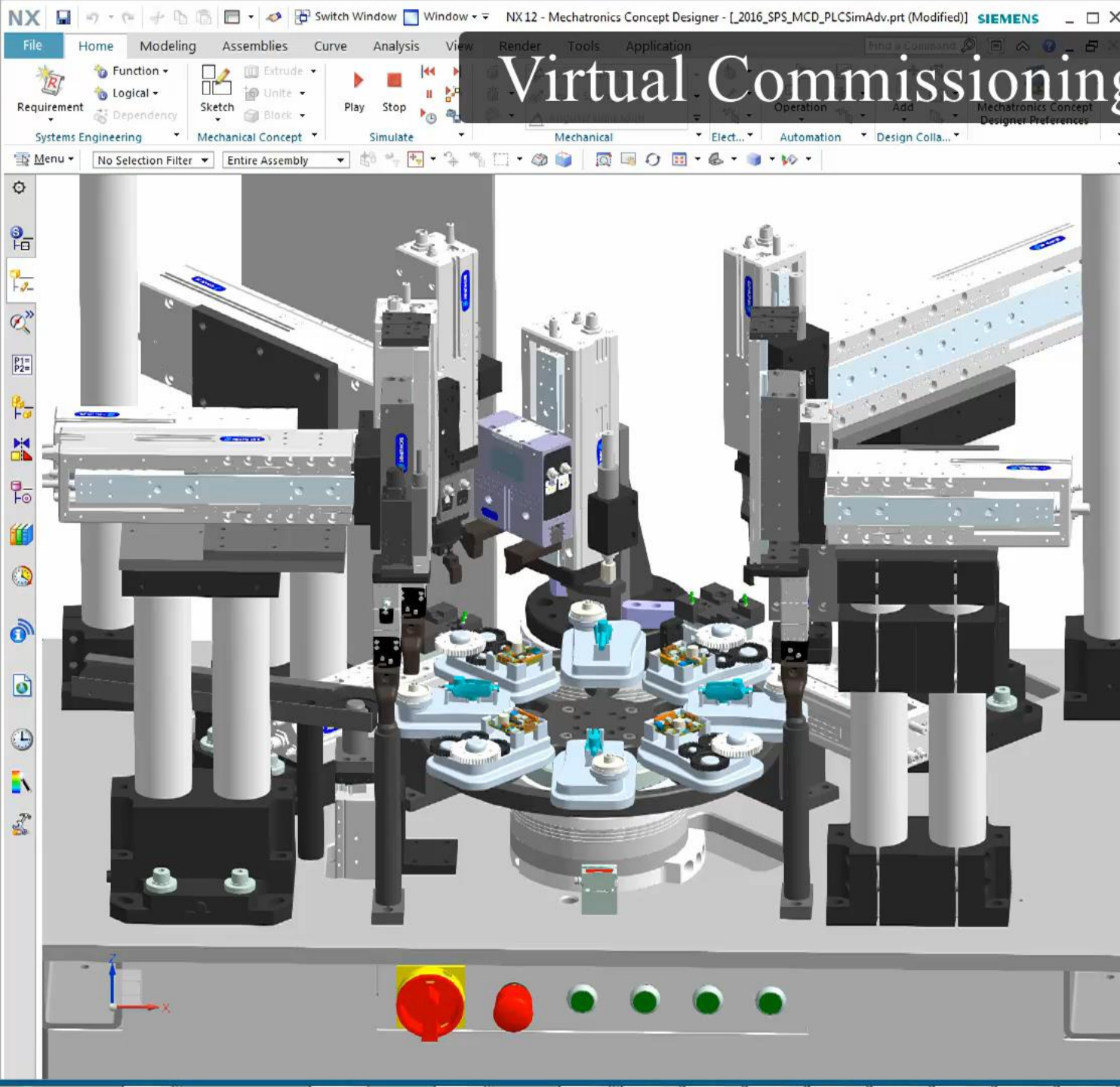
Faza preeliminara [Avant-projet]



Punerea in functiune virtuala (Virtual Commissioning)



Virtual Commissioning NX MCD



Totally Integrated Automation PORTAL

PLC tags ▶ Default tag table [152]

Tags User constants System constants

Default tag table

Name	Data type	Address	Retain	Access...	Writa...	Visibl...	Monitor v...
FM1_MoveUp	Bool	%Q0.0		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_MoveDown	Bool	%Q0.1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_MoveIn	Bool	%Q0.2		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_MoveOut	Bool	%Q0.3		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_CloseGripper	Bool	%Q0.4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_IsUp	Bool	%I0.0		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_IsDown	Bool	%I0.1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_IsIn	Bool	%I0.2		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_IsOut	Bool	%I0.3		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_IsGripperClose	Bool	%I0.4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_IsGripperOpen	Bool	%I0.5		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM1_NextStep	Bool	%Q0.5		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Initialize	Bool	%Q0.6		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
START	Bool	%Q0.7		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_MoveUp	Bool	%Q0.8		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_MoveDown	Bool	%Q0.9		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_MoveIn	Bool	%Q0.10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_MoveOut	Bool	%Q0.11		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_CloseGripper	Bool	%Q0.12		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_IsUp	Bool	%I0.6		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_IsDown	Bool	%I0.7		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_IsIn	Bool	%I0.8		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_IsOut	Bool	%I0.9		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_IsGripperClose	Bool	%I0.10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_IsGripperOpen	Bool	%I0.11		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM2_NextStep	Bool	%Q0.13		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_MoveUp	Bool	%Q0.14		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_MoveDown	Bool	%Q0.15		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_MoveIn	Bool	%Q0.16		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_MoveOut	Bool	%Q0.17		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_CloseGripper	Bool	%Q0.18		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_IsUp	Bool	%I0.12		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_IsDown	Bool	%I0.13		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_IsIn	Bool	%I0.14		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_IsOut	Bool	%I0.15		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_IsGripperClose	Bool	%I0.16		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_IsGripperOpen	Bool	%I0.17		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_NextStep	Bool	%Q0.19		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_Rotate180	Bool	%Q0.20		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_IsRotated180	Bool	%I0.18		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM5_IsRotated0	Bool	%I0.19		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FM8_MoveUp	Bool	%Q0.21		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

PLC programming

S7-PLCSIM Advanced V1.0 Control Panel

Online Access
 PLCSIM PLCSIM Virtual Eth. Adapter

TCP/IP communication with: <Local>

Virtual Time Scaling
0.01 Off 100

Start Virtual S7-1500 PLC
Instance name: PLC_1
PLC type: Unspecified CPU 1500
Start

1 Active PLC Instance(s):
PLC_1 / 192.168.0.1

Runtime Manager Port: 50000
Virtual SIMATIC Memory Card
Show Balloon Messages:
Function Manual
Exit

Portal view Overview Default tag t... Connected to PLC_1, via address IP=19...

Virtual Commissioning

Functionalitate, avantaje si beneficii

Funcionalitate

- Modelarea echipamentelor de control (senzori, mese de transport)
- Definitii de semnale bazate pe modul de functionare real al echipamentelor
- Simularea logicii interne a resurselor (boolean si analogic)
- Conectarea modelului virtual cu codul PLC
- Simulare integrata, cu utilizarea PLC-ului si a echipamentelor hardware reale

Avantaje

- Validarea virtuala a sistemelor mecanice si electrice
- Nu este nevoie de instalarea echipamentelor in santier pentru validarea codului PLC

Beneficii

- Reduce timpul de punere in functiune in santier
- Promoveaza colaborarea intre departamentele de design mecanic si control

