



# Andhra Pradesh State Skill Development Corporation







## Basics of PLC

**Siemens Automation Software**



**Andhra Pradesh State Skill Development Corporation (APSSDC)**



## **Siemens Automation Software**





## Languages of the user interface

The screenshot shows the Siemens TIA Portal interface. On the left is the 'Start' screen with options like 'Open existing project', 'Create new project', and 'User interface language'. A yellow box highlights the 'User interface language' button. On the right is the 'Project view' window for 'My\_Project'. A red dashed box highlights the 'Settings' menu item under 'Options'. Another red dashed box highlights the 'User interface language' dropdown in the 'General settings' section, which is set to 'English'. The Siemens logo is visible at the top right.

**User interface language**

Select the language in which the user interface will be displayed:

- English (selected)
- Deutsch
- English
- Español (España)
- Français (France)
- Italiano (Italia)
- 中文

**Project view**

**General settings**

- User name: TIA-Portal
- User interface language: English (highlighted)
- Mnemonic: International

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## SIEMENS

### Project languages

The screenshot shows the Siemens TIA Portal interface with the title bar "Siemens - My\_Project" and the sub-title "My\_Project > Languages & resources > Project languages". The left sidebar displays the "Project tree" under the "Devices" category, showing a hierarchy including "My\_Project", "PLC\_1 [CPU 1214C DC/DC/DC]", "HMI\_1 [KTP600 Basic PN]", "Common data", "Documentation settings", "Languages & resources", "Project texts", "Project languages" (which is selected), and "Project graphics". The main pane is titled "General" and contains two dropdown menus: "Editing language: English (United States)" and "Reference language: German (Germany)". Below these are two lists of language options, each preceded by a checkbox. The first list includes English (Republic of the Philippines), English (South Africa), English (Trinidad and Tobago), English (United Kingdom), English (United States) (which is checked), English (Zimbabwe), Estonian (Estonia), Faroese (Faroe Islands), Finnish (Finland), French (Belgium), French (Canada), French (France), and French (Luxembourg). The second list includes French (Principality of Monaco), French (Switzerland), Galician (Galician), Georgian (Georgia), German (Austria), German (Germany) (which is checked), German (Liechtenstein), German (Luxembourg), German (Switzerland), Greek (Greece), Hindi (India), Hungarian (Hungary), and Icelandic (Iceland). At the bottom of the main pane are buttons for "Properties", "Info", "Diagnostics", and "Compile". The status bar at the bottom right shows "Project My\_Project opened".

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The screenshot shows the SIMATIC Manager software interface for a project named "My\_Project". The main window displays the "Project texts" section under the "Languages & resources" category. The left pane shows the "Project tree" with nodes like "Devices", "My\_Project", "Systemfehler m...", and "Languages & resources". The right pane lists "User texts" and "System texts" for the selected object "My\_Project". The "User texts" table includes rows for "HMI\_1" and "PLC\_1". The "System texts" table includes rows for "Baugruppenra..." and "Initiator Platz 1". The bottom navigation bar includes tabs for "General", "Cross-references", "Compile", "Overview", "Project texts", and "Project lang...". A status bar at the bottom right indicates "Project My\_Project opened".

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### Portal and Project view

The screenshot shows the Siemens TIA Portal interface. On the left, there is a sidebar with various project management options like 'Open existing project', 'Create new project', and 'Migrate project'. The main area displays a 'Project tree' for a project named 'My\_Project'. Under 'Devices & networks', it lists 'PLC\_1 [CPU 1214C DOD/DC]' which is expanded to show 'Device configuration', 'Online & diagnostics', and 'Program blocks'. The 'Program blocks' section contains several function blocks such as OB\_Cycle [OB1], FC\_ConMotor [FC16], FC\_Count [FC18], FC\_Fault [FC17], FC\_Indicate [FC14], FC\_Mode [FC15], and DIH4DO10. Below the program blocks, there are sections for 'System blocks', 'Technological objects', 'External source files', 'PLC tags', and 'PLC data types'. To the right of the project tree, there is a 'Topology view' showing a ladder logic diagram for 'PLC\_1'. Below the ladder logic is a 'Device overview' table:

Module	Slot	I address	Q address	Type	Order no.
RS232_1	102			CM 1241 (RS232)	6E57 241-
RS485_1	101			CM 1241 (RS485)	6E57 241-
PLC_1	1	1	0..1	DIH4DO10	CPU 1214C DOD/DC 6E57 214-

At the bottom of the interface, there are tabs for 'Portal view', 'Overview', 'PLC\_1', and 'Project My\_Project opened'.

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### Portal view

The screenshot shows the Siemens TIA Portal interface. On the left, there's a sidebar with icons for 'Start', 'Devices & networks', 'PLC programming', 'Visualization', and 'Online & Diagnostics'. Below this is a section titled 'Portals for different tasks' containing 'Project view'. A yellow box highlights the 'Actions for the selected portal' menu, which is open and lists options like 'Open existing project', 'Create new project', 'Migrate project', etc. Another yellow box highlights the 'Selection panel for the selected action' on the right, which shows a list of recently used projects: 'My\_Project', 'Mein\_Projekt', and 'test'. At the bottom, it says 'Opened project: C:\S7\_Courses\S7-1200\My\_Project\My\_Project'.

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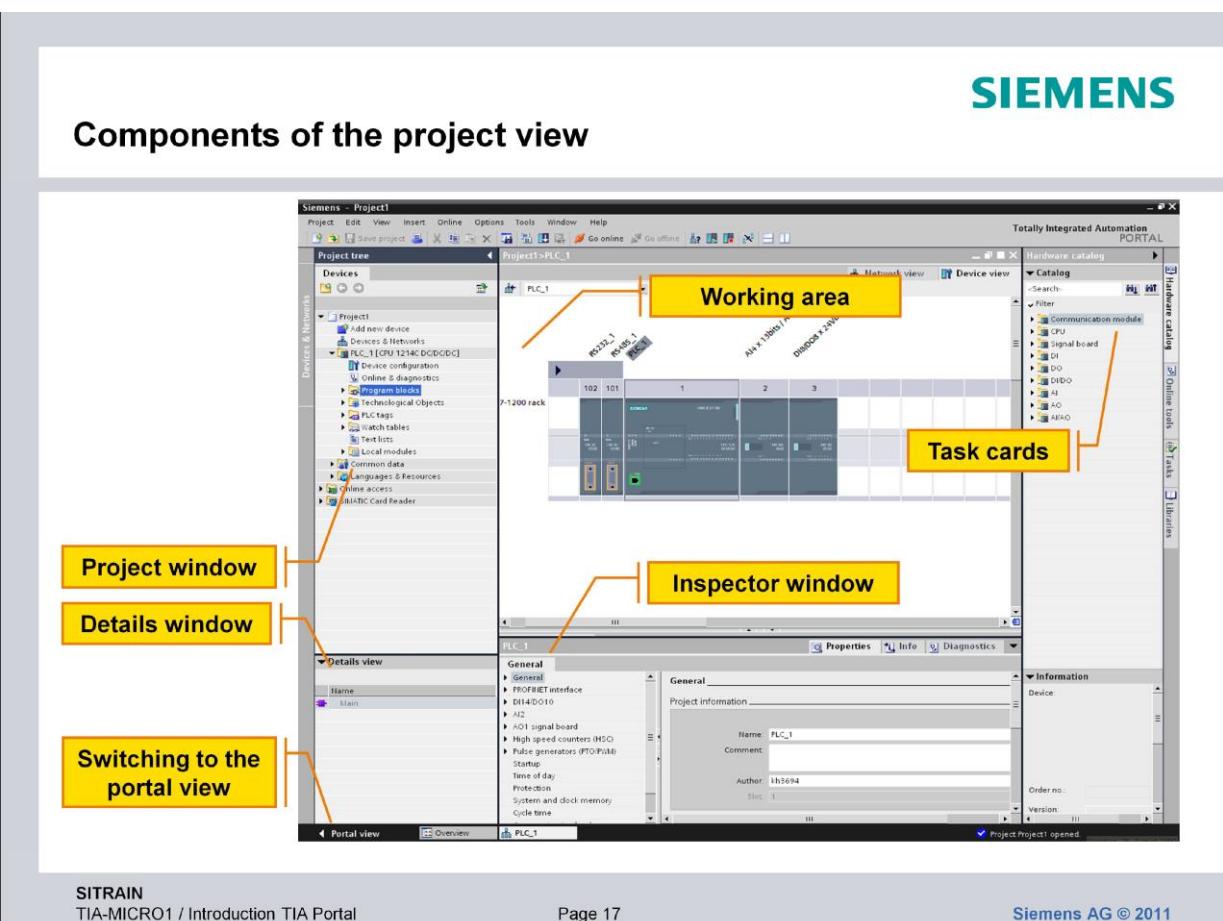
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## Components of the project view

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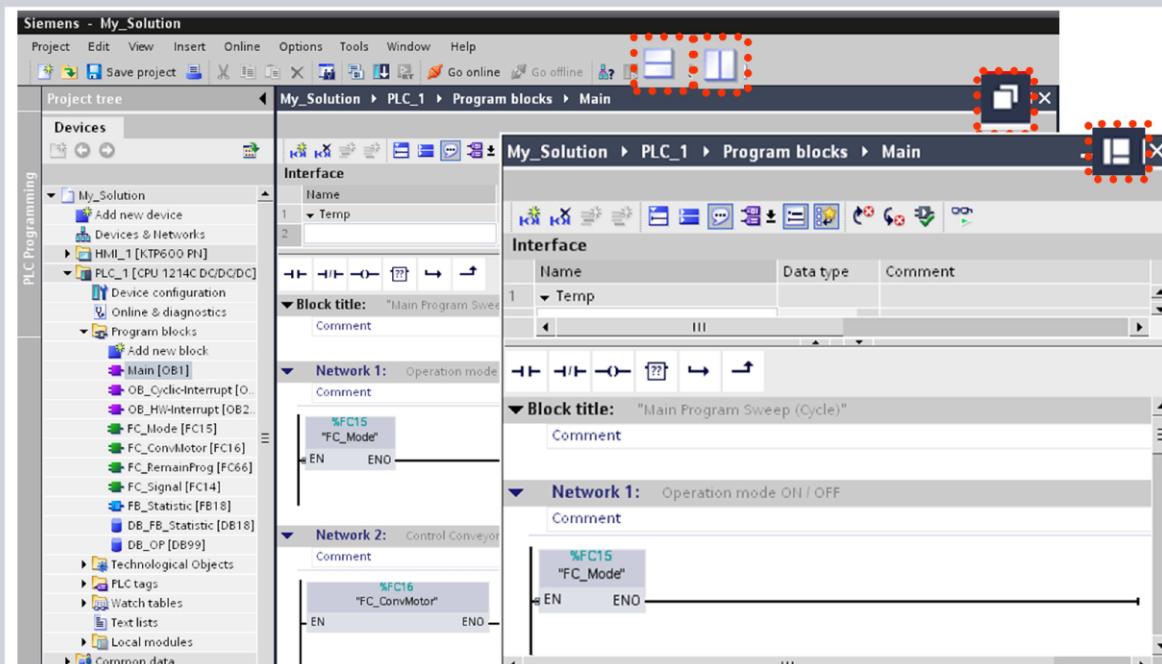
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## Window sections in the working area

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