



Empowering people through automation

core training **CATALOG**

OMRON

Industrial Automation

July, 2023
automation.omron.com



Omron Training is your educational service partner specializing in automation technologies. As a leading industry expert, we assist global factories in enhancing their manufacturing teams' understanding of engineering concepts and Omron product technology. Our courses cover a wide range of topics, from machine safety basics to industry certifications. We also offer product and maintenance trainings that focus on Omron's automation products, enabling users to configure and maintain equipment effectively. Our classes cater to individuals with design, product selection, integration, or programming responsibilities.

[Learn more ›](#)



OMRON

Our Mission: To improve lives and contribute to a better society

90+ ↑

Years automation
experience

350

Offices in
117 countries

5.9 ↑

Billion USD
annual sales



Contents

With a variety of courses available, our trainings support both newcomers and experienced professionals in keeping up with the ever-changing world of automation. We provide training sessions in various formats, allowing flexibility for skill development and maximizing the value of your automation technology. Our educational services offer individual classes and guided training programs to help your team gain the expertise needed to support your production. Here, we present a selection of our popular training courses on safety, robotics, and automation. For a comprehensive list of our offerings, please visit our website.

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Safety Training Courses

Omron offers a series of courses that are focused on safety solutions. Our Skill Builder training is designed to help your team gain confidence in fundamental manufacturing skill sets such as machine safety. Through our partnership with TÜV Rheinland, Omron can provide the necessary training to achieve the prestigious TÜV Certification for Functional Safety Engineer. A Functional Safety Technician class is also available.



Courses

Functional Safety Skill Builder

- Introductory course to general safety products and practices
- Learn to identify and assess machine safety risks and deploy safeguarding
- For Anyone that has responsibilities to reduce machine and process risks in a facility, including both plant employees and corporate employees

TÜV Functional Safety of Machinery for Technicians

- Intermediate course on functional machine safety
- TÜV sanctioned course which includes certification testing to be registered as a TÜV Rheinland Functional Safety Technician
- Learn how to correctly interpret standards and maintain machine safeguarding devices and safety controls to meet safety standard requirements
- For Technicians, Engineers, and Occupational Health and Safety (OHS) professionals with a minimum two years of factory floor manufacturing experience, or commercial/industrial electrical maintenance experience

Omron Preparatory Course: Functional Safety of Machinery for Engineers

- Advance course to gain in-depth understanding of functional machine safety
- 9-week training program which includes Omron's 8-week prep course plus TÜV Functional Safety Machinery course and certification testing for TÜV Rheinland Functional Safety Engineer
- Learn how to identify safety risks and implement design requirements for machine safeguarding and safety controls to meet safety standard requirements
- For seasoned Engineers with a university degree and at least three years of relevant safety experience





Safety Training Courses

| Course | Language | | | Delivery | | | Part Number |
|--|----------|--------|---------|-----------|--------------|-----------|---------------------------|
| | English | French | Spanish | On Demand | Virtual Live | In Person | |
| Functional Safety Skill Builder | • | | | | • | | S-SAFETYSKBUILDVL-B-OEI |
| | | | • | | • | | S-SAFETYSKBUILDVLS-B-OEI |
| | • | | | | | • | IA-TRN-SSB |
| | | | • | | | • | S-SSBIPS-B-OEI |
| TÜV Functional Safety of Machinery for Technicians | • | | | | • | | S-TUVTECH1STUDENTVL-B-OEI |
| | | | • | | • | | S-TUVFSTECHVLS-B-OEI |
| | • | | | | | • | TRN-TUV-FUNCT-SAFETY-TECH |
| | | | • | | | • | S-TUVFSTECHIPS-B-OEI |
| TÜV Functional Safety of Machinery for Engineers | • | | | | • | | S-TUVFSMACHVLE-B-OEI |
| | • | | | | | • | TRN-TUV-ENGINEER-O-E |
| Omron Preparatory Course: Functional Safety of Machinery for Engineers ¹ | • | | | | • | | S-OMFUNCTSAFEENGVL-B-OEI |
| | | | • | | • | | S-OMRONFSENGVLS-B-OEI |
| | • | | | | | • | TRN-STY-TUV-S-X-O-E |
| | | | • | | | • | S-OMRONFSENGIPS-B-OEI |

1. This course is a 9-week training program consisting of an 8-week prep course plus TÜV Functional Safety of Machinery for Engineers class and certification testing.



Robotics Training Courses

Robotics training courses deliver introduction to all Omron's robots—Mobile, Industrial, and Collaborative—and their respective programming software. Intermediate courses are available to understand additional features and functions.



Courses

Mobile Robot Programming & Fleet Management

- Introductory course to develop firm foundation of skills and knowledge of Omron mobile robots including software configuration and execution of tasks
- Learn multiple robot queuing, distribution of jobs within a robot fleet, and advanced mobile robot communications and control
- For Engineers, Programmers, and Maintenance Personnel who will be implementing, or maintaining Omron Mobile Robots separately or in a fleet

ACE Programming

- Introductory course to ACE3 or ACE4 programming software for industrial robots
- Learn software interface to create, store, and test programs as well as troubleshoot applications
- For Engineers, Programmers and Technicians who will be designing and commissioning applications using Omron industrial robots

TMFlow Programming

- Introductory course to TMFlow programming software for TM collaborative robots
- Learn software interface to create, store and test programs as well as troubleshoot applications
- For Engineers, Programmers and Technicians who will be designing and commissioning applications using the Omron TM Series Collaborative Robots

TMVision and Palletizing

- Intermediate course that expands on TMFlow programming to utilize robot camera feature
- Learn vision system functions of the Omron collaborative robots
- For Programmers and Engineers who will be using vision or palletizing in their applications using the Omron TM Series Collaborative Robots



Robotics Training Courses

| Course | Language | | | Delivery | | | Part Number |
|---|----------|--------|---------|-----------|--------------|-----------|---------------------------|
| | English | French | Spanish | On Demand | Virtual Live | In Person | |
| Mobile Robot Programming & Fleet Management | • | | | | • | | S-MOBILEPROFLEETVLE-B-OEI |
| | • | | | | | • | S-MOBILEPROGFLEETLE-B-OEI |
| TMFlow Programming | • | | | • | | | S-TMFLOWLEV1VOE-B-OEI |
| | • | | | | • | | S-TMFLOWLEV1VLE-B-OEI |
| | | | • | | • | | S-TMFLOWPROG1VLS-B-OEI |
| | • | | | | | • | S-TMFLOWLEV1IPE-B-OEI |
| TMFlow Programming Advanced | • | | | | | • | S-TMFLOWLEV2IPE-B-OEI |
| TMVision & Palletizing | • | | | | | • | S-TMVISIONIPE-B-OEI |
| ACE3 Programming | • | | | • | | | S-ACEV3PROGLEV1VOE-B-OEI |
| | • | | | | • | | S-ROBOTACEVLE-B-OEI |
| | • | | | | | • | TRN-RBT-ACE-P-L1-O-E |
| | • | | | | | • | TRN-RBT-ACE-P-L2-O-E |
| ACE4 Programming | • | | | • | | | S-ACEV4PROGLEV1VOE-B-OEI |
| | • | | | | • | | S-ACE4PROGL1VLE-B-OEI |
| | | | • | | • | | S-ACE4PROGL1VLS-B-OEI |
| | • | | | | | • | S-ACE4PROGL1IPE-B-OEI |
| eCobra / sCobra 600-800 Maintenance | • | | | | | • | S-COBRAMAINTIPE-B-OEI |
| AMR Maintenance LD Platforms | • | | | | | • | S-AMRMAINTLDIPE-B-OEI |



Sysmac Training Courses

Sysmac training provides understanding of Omron's Sysmac platform including configuration and programming using Sysmac Studio's integrated development environment.



Courses

Sysmac Programming

- Introductory course to Sysmac Studio
- Learn configuration and programming of the controller using Sysmac Studio's integrated development environment
- Understand architecture of NJ Series and NX Series Machine Automation Controllers and EtherCAT network
- For Engineers and Programmers who will be using the NJ Series or NX Series Machine Automation Controllers in their automated equipment

Sysmac Safety

- Intermediate course to Sysmac with safety control systems
- Learn configuration and programming of the NX Safety Controller using Sysmac Studio
- Understand architecture of the NX Safety Controller and EtherCAT safety communications
- For Engineers and Maintenance Personnel who will design or maintain safety control systems using the NX Safety Controller

Sysmac HMI

- Intermediate course to Sysmac with NA Series operator interface terminals
- Learn configuration and programming of the NA Series operator interface terminals using Sysmac Studio's integrated environment
- For Engineers and Programmers who will be using the NA Series operator interface terminals to visualize and interact with their automated equipment

Sysmac Motion

- Intermediate course to Sysmac with NJ Series and NX Series motion control functions
- Learn configuration and programming of the built-in motion control capabilities of the NJ Series and NX Series Machine Automation Controller using Sysmac Studio's integrated environment
- Learn motion control configuration and commands, as well as connection of servos to the EtherCAT network
- For Engineers and Programmers who will be using the NJ Series or NX Series Machine Automation Controllers for motion control functions in their automated equipment



Sysmac Training Courses

| Course | Language | | | Delivery | | | Part Number |
|-------------------------------|----------|--------|---------|-----------|--------------|-----------|---------------------------|
| | English | French | Spanish | On Demand | Virtual Live | In Person | |
| Sysmac Programming | • | | | • | | | S-SYSMACPLCPROGVOE-B-OEI |
| | • | | | | • | | S-SYSMACPROGVL-B-OEI |
| | | • | | | • | | S-SYSMACPROGVLF-B-OEI |
| | | | • | | • | | S-SYSMACPROGVLSP-B-OEI |
| | • | | | | | • | TRN-SYS-PLC-P-L1-O-E |
| | | • | | | | • | TRN-SYS-PLC-P-L1-O-F |
| | | | • | | | • | TRN-SYS-PLC-P-L1-O-S |
| Sysmac ePLC Robot Programming | • | | | | | • | TRN-SYS-EPLC-P-L1-O-E |
| Sysmac Safety | • | | | • | | | S-SYSMACSAFEPROGVOE-B-OEI |
| | • | | | | • | | S-SYSMACSAFETYVLE-B-OEI |
| | • | | | | | • | TRN-SYS-SAFE-P-L1-O-E |
| Sysmac HMI | • | | | • | | | S-SYSMACHMIVOE-B-OEI |
| | • | | | | • | | S-SYSMACHMIVLE-B-OEI |
| | | | • | | • | | S-SYSMACHMIVLSP-B-OEI |
| | • | | | | | • | TRN-SYS-HMI-P-L1-O-E |
| Sysmac Motion | • | | | | • | | S-SYSMACMOTIONL1VLE-B-OEI |
| | • | | | | | • | TRN-SYS-MOT-P-L1-O-E |
| | | | • | | | • | TRN-SYS-MOT-P-L1-O-S |
| Sysmac Maintenance | • | | | | | • | TRN-SYS-PLC-M-L1-O-E |



Vision Training Courses

Vision training enables users to learn about associated software for various vision systems, barcode reading, and label verification.



Courses

FH/FZ/FJ/FHV Vision Systems Programming

- Introductory course to learn configuration and programming of the FH/FZ/FJ/FHV vision systems utilizing v6.40
- Use the FZ-PanDA software and learn how to navigate and create multiple inspection programs and configure system settings for hardware operation
- For Engineers, Maintenance Personnel and Individuals who need to understand and will be using the FH/FZ Series Machine Vision Controllers in their automated equipment

LVS-95XX Software Training

- Introductory course to barcode grading parameters, defects in barcodes, and some troubleshooting
- Learn software setup to a specific application standard, calibration, and other system settings
- For New Users of the LVS-95XX Series products

MicroHAWK Programming

- Learn how to configure MicroHAWK AutoID camera and use the WebLink interface to read various types of 1D and 2D barcodes
- For Anyone who want to learn about Omron Microscan MicroHAWK ID products
- AutoVISION Programming
- Introductory course to learn configuration and programming of the MicroHAWK machine vision product line using AutoVISION software
- Learn how to upgrade WebLink based barcode reader to a Machine Vision camera
- For Engineers and Programmers who will be using AutoVISION software platform



Vision Training Courses

| Course | Language | | | Delivery | | | Part Number |
|---|----------|--------|---------|-----------|--------------|-----------|-------------------------|
| | English | French | Spanish | On Demand | Virtual Live | In Person | |
| FH/FZ/FJ/FHV Vision Systems Programming | • | | | | | • | TRN-VIS-SEN-P-L1-O-E |
| | • | | | | • | | S-FHSERIESPROGVLE-B-OEI |
| | | | • | | • | | S-FHSERIESPROGVLS-B-OEI |
| FH 3D Machine Vision | • | | | | • | | S-FH3DMACHVISVLE-B-OEI |
| LVS-95XX Software | • | | | • | | | S-OCRLVS95XXVOE-B-OEI |
| | • | | | | • | | S-OCRLVS95XXVL-B-OEI |
| MicroHAWK Weblink | • | | | • | | | S-OCRAUIDMHVOE-B-OEI |
| AutoVISION Programming | • | | | | • | | S-MHAUTOVISIONVLE-B-OEI |
| Visionscape FrontRunner Machine Vision Training | • | | | | • | | S-VISIONSCAPEVLE-B-OEI |



Training Course Matrix - Continued on the Next Page

| Course | Language | | | Delivery | | | Part Number |
|--|----------|--------|---------|-----------|--------------|-----------|---------------------------|
| | English | French | Spanish | On Demand | Virtual Live | In Person | |
| Safety | | | | | | | |
| Functional Safety Skill Builder | • | | | | • | | S-SAFETYSKBUILDVL-B-OEI |
| | | | • | | • | | S-SAFETYSKBUILDVLS-B-OEI |
| | • | | | | | • | IA-TRN-SSB |
| | | | • | | | • | S-SSBIPS-B-OEI |
| TÜV Functional Safety of Machinery for Technicians | • | | | | • | | S-TUVTECH1STUDENTVL-B-OEI |
| | | | • | | • | | S-TUVFSTECHVLS-B-OEI |
| | • | | | | | • | TRN-TUV-FUNCT-SAFETY-TECH |
| | | | • | | | • | S-TUVFSTECHIPS-B-OEI |
| TÜV Functional Safety of Machinery for Engineers | • | | | | • | | S-TUVFSMACHVLE-B-OEI |
| | • | | | | | • | TRN-TUV-ENGINEER-O-E |
| Omron Preparatory Course: Functional Safety of Machinery for Engineers ¹ | • | | | | • | | S-OMFUNCTSAFEENGVL-B-OEI |
| | | | • | | • | | S-OMRONFSENGVLS-B-OEI |
| | • | | | | | • | TRN-STY-TUV-S-X-O-E |
| | | | • | | | • | S-OMRONFSENGIPS-B-OEI |
| Robotics | | | | | | | |
| Mobile Robot Programming & Fleet Management | • | | | | • | | S-MOBILEPROFLEETVLE-B-OEI |
| | • | | | | | • | S-MOBILEPROGFLEETLE-B-OEI |
| TMFlow Programming | • | | | • | | | S-TMFLOWLEV1VOE-B-OEI |
| | • | | | | • | | S-TMFLOWLEV1VLE-B-OEI |
| | | | • | | • | | S-TMFLOWPROG1VLS-B-OEI |
| | • | | | | | • | S-TMFLOWLEV1IPE-B-OEI |
| TMFlow Programming Advanced | • | | | | | • | S-TMFLOWLEV2IPE-B-OEI |
| TMVision & Palletizing | • | | | | | • | S-TMVISIONIPE-B-OEI |
| ACE3 Programming | • | | | • | | | S-ACEV3PROGLEV1VOE-B-OEI |
| | • | | | | • | | S-ROBOTACEVLE-B-OEI |
| | • | | | | | • | TRN-RBT-ACE-P-L1-O-E |
| | • | | | | | • | TRN-RBT-ACE-P-L2-O-E |
| ACE4 Programming | • | | | • | | | S-ACEV4PROGLEV1VOE-B-OEI |
| | • | | | | • | | S-ACE4PROGL1VLE-B-OEI |
| | | | • | | • | | S-ACE4PROGL1VLS-B-OEI |
| | • | | | | | • | S-ACE4PROGL1IPE-B-OEI |
| eCobra / sCobra 600-800 Maintenance | • | | | | | • | S-COBRAMAINTIPE-B-OEI |
| AMR Maintenance LD Platforms | • | | | | | • | S-AMRMAINTLDIPE-B-OEI |

1. This course is a 9-week training program consisting of an 8-week prep course plus TÜV Functional Safety of Machinery for Engineers class and certification testing.



| Course | Language | | | Delivery | | | Part Number |
|---|----------|--------|---------|-----------|--------------|-----------|---------------------------|
| | English | French | Spanish | On Demand | Virtual Live | In Person | |
| Sysmac | | | | | | | |
| Sysmac Programming | • | | | • | | | S-SYSMACPLCPROGVOE-B-OEI |
| | • | | | | • | | S-SYSMACPROGVL-B-OEI |
| | | • | | | • | | S-SYSMACPROGVLF-B-OEI |
| | | | • | | • | | S-SYSMACPROGVLSP-B-OEI |
| | • | | | | | • | TRN-SYS-PLC-P-L1-O-E |
| | | • | | | | • | TRN-SYS-PLC-P-L1-O-F |
| | | | • | | | • | TRN-SYS-PLC-P-L1-O-S |
| Sysmac ePLC Robot Programming | • | | | | | • | TRN-SYS-EPLC-P-L1-O-E |
| Sysmac Safety | • | | | • | | | S-SYSMACSAFEPROGVOE-B-OEI |
| | • | | | | • | | S-SYSMACSAFETYVLE-B-OEI |
| | • | | | | | • | TRN-SYS-SAFE-P-L1-O-E |
| Sysmac HMI | • | | | • | | | S-SYSMACHMIVOE-B-OEI |
| | • | | | | • | | S-SYSMACHMIVLE-B-OEI |
| | | | • | | • | | S-SYSMACHMIVLSP-B-OEI |
| | • | | | | | • | TRN-SYS-HMI-P-L1-O-E |
| Sysmac Motion | • | | | | • | | S-SYSMACMOTIONL1VLE-B-OEI |
| | • | | | | | • | TRN-SYS-MOT-P-L1-O-E |
| | | | • | | | • | TRN-SYS-MOT-P-L1-O-S |
| Sysmac Maintenance | • | | | | | • | TRN-SYS-PLC-M-L1-O-E |
| Vision | | | | | | | |
| FH/FZ/FJ/FHV Vision Systems Programming | • | | | | | • | TRN-VIS-SEN-P-L1-O-E |
| | • | | | | • | | S-FHSERIESPROGVLE-B-OEI |
| | | | • | | • | | S-FHSERIESPROGVLS-B-OEI |
| FH 3D Machine Vision | • | | | | • | | S-FH3DMACHVISVLE-B-OEI |
| LVS-95XX Software | • | | | • | | | S-OCRLVS95XXVOE-B-OEI |
| | • | | | | • | | S-OCRLVS95XXVL-B-OEI |
| MicroHAWK Weblink | • | | | • | | | S-OCRAUIDMHVOE-B-OEI |
| AutoVISION Programming | • | | | | • | | S-MHAUTOVISIONVLE-B-OEI |
| Visionscape FrontRunner Machine Vision Training | • | | | | • | | S-VISIONSCAPEVLE-B-OEI |
| Other | | | | | | | |
| Ethernet/IP Network | • | | | | | • | TRN-NET-EIP-P-L1-O-E |
| CX-Programmer | • | | | • | | | S-CXPROGLV1VOE-B-OEI |
| | • | | | | • | | S-CXPROGVL-B-OEI |
| | • | | | | | • | TRN-CX1-PLC-P-L1-O-E |
| | | | • | | | • | TRN-CX1-PLC-P-L1-O-S |
| CX-Programmer Advanced | • | | | • | | | S-CXPROGL2VOE-B-OEI |
| | • | | | | | • | TRN-CX1-PLC-P-L2-O-E |
| | | • | | | | • | TRN-CX1-PLC-P-L2-O-F |
| Power PMAC Application Training | • | | | | | • | TRN-PPMAC-APPS-ODT |
| Power PMAC Essentials | • | | | | | • | TRN-PPMAC-BEGINNERS-ODT |
| Laser Marker Training | • | | | • | | | S-LASERMARKERVOE-B-OEI |

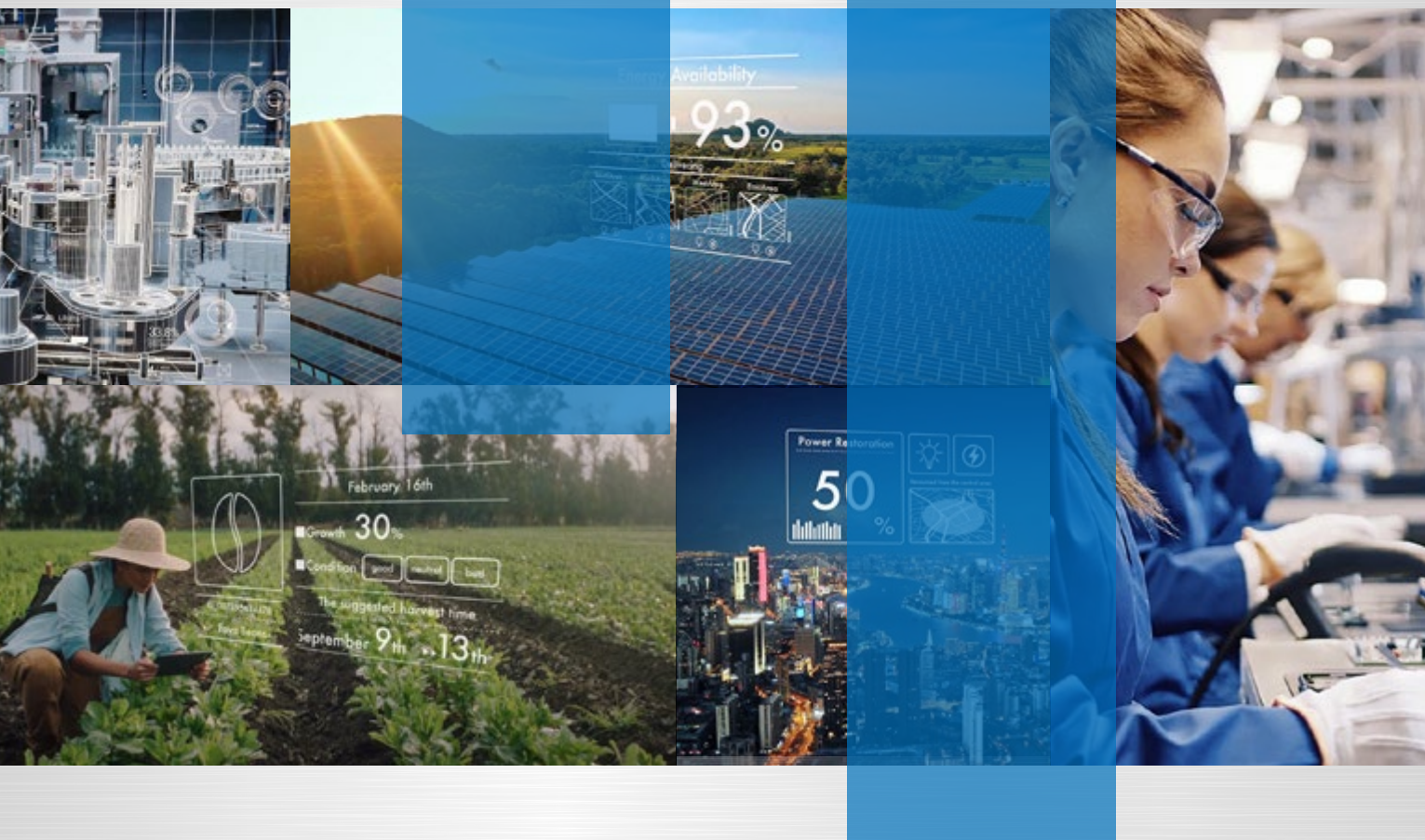
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