

# Live Online Training: Automated distance and differential protection testing with CMC





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**English** 



# oCprs02en

You will learn how to efficiently test distance and transformer differential relays with the OMICRON Test Universe. Become familiar with the test procedures in theoretical and live-demo sessions and get to know the benefits of reusable test templates.

### **Objectives**

- Strengthen your testing skills with the CMC hardware and the Test Universe software
- Refresh your technical knowledge on distance and transformer differential protection functions
- Be able to choose the appropriate software modules for testing distance and transformer differential relays
- Become more efficient in testing by creating and expanding reusable test plans
- Get to know the full range of OMICRON solutions for protection testing

#### Content

- > Power system protection principles and typical substation topologies
- Fundamentals of distance, ground fault and transformer differential protection functions >
- Working with OMICRON Control Center (OCC) test plans >
- Modelling the relay characteristics in the Test Object and configuring the CMC test set
- Creating a reusable test plan for testing distance relays including
  - testing the trip times
  - verifying the zone reaches
- Creating a reusable test plan for testing transformer differential relays including
  - testing the stability during external faults
  - testing the tripping characteristic and times
  - testing harmonic restraint function
- Testing ground fault protection with RelaySimTest using realistic network simulation
- Live-demo of testing of distance and transformer differential relays as well as ground fault protection function

### **Solutions**

Test Universe: Advanced Distance, Advanced Differential **OMICRON Control Center** RelaySimTest CMControl, ADMO CMC-Family

### **Audience**

Technical staff from utilities or companies working mainly in commissioning or maintenance testing

## **Prerequisites**

Training course "Power System Protection Testing 1" or equivalent knowledge

