Niagara 4 Technician / User Proficient

Why thinktech?

- We are the only Niagara certified training partner in Australia
- Courses are delivered by industry experts with many years of experience
- We are proud of our 100% pass rate
- We offer attractive pricing and multiple training dates

Course description

Niagara 4 Technician / User Proficient course provides the foundations to use the most integrated system in the world.

- Program designed for technicians, end users, operators, consultants and engineers from different backgrounds and trades, and all people/organizations that are willing to learn Niagara 4.
- The course delivered over 4 days and covers most aspects of Niagara.
- All demonstrations provided using real life software environment instead of traditional powerpoint presentations.
- All students are encouraged to work through series of labs designed to reinforce learning.
- Although prior Niagara experience is beneficial, it is not essential.

The course ends with the exam testing the knowledge of main Niagara framework areas, after passing the exam, the attendee is awarded the Niagara
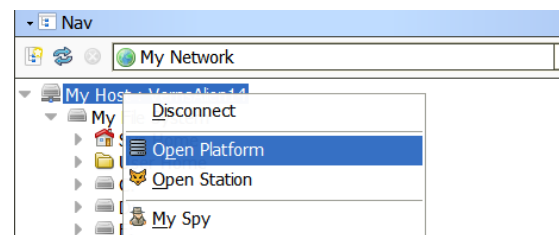
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4 Technician / User Proficient certificate. The certificate demonstrates the expertise to use Niagara 4.

N4 Technician / User Proficient (4 days program)

Day 1

- Introduction and software overview
    - Niagara and JACE history
    - Data types
    - System architecture
    - Modern systems based on Niagara

- Platform and station fundamentals
    - Differences between platform and station
    - Platform elements
    - Station components and services

- New Niagara 4 station
    - How to create a new station
    - Station locations
    - Running stations

- Logic components
    - Common logic components overview
    - Niagara palettes (components libraries)
    - Pump control logic

- Tagging and dictionaries
    - Smart dictionaries
    - Haystack
    - Why, where and how to use tags?
    - Tagging Niagara components

- PID loops
    - Loop functionality in Niagara systems
    - Setting up and usage of a PID loop components
    - Boiler control loop

- Alarms and notifications

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o   Types of alarms

o   Alarms management in Niagara systems

o   Setting up and routing alarms

o   Types of recipients

Info	Timestamp	Source State	Ack State	Source	Alarm Class	Priority	Message Text
🔔	08-Oct-19 9:24:19 AM AEDT	Offnormal	Unacked	Floor1_AHU_S_Filter_Alarm	Building1_AlarmClass	255	Alarm
🔔	08-Oct-19 9:24:25 AM AEDT	Offnormal	Unacked	Floor1_AHU_S_Filter_Alarm	Building1_AlarmClass	255	Alarm
🔔	09-Oct-19 9:41:19 AM AEDT	Offnormal	Unacked	Floor1_AHU_S_Filter_Alarm	Building1_AlarmClass	255	Alarm
🔔	09-Oct-19 2:00:52 PM AEDT	Normal	Unacked	Building1_FCU1_2_Filter_Alarm	Building1_AlarmClass	255	Back to Normal
🔔	09-Oct-19 2:01:00 PM AEDT	Normal	Unacked	Building1_FCU1_3_Filter_Alarm	Building1_AlarmClass	255	Back to Normal
🔔	09-Oct-19 2:01:07 PM AEDT	Offnormal	Unacked	Building1_FCU1_4_Filter_Alarm	Building1_AlarmClass	255	Alarm
🔔	09-Oct-19 2:01:48 PM AEDT	Normal	Unacked	Building1_FCU1_5_Filter_Alarm	Building1_AlarmClass	255	Back to Normal
🔔	09-Oct-19 2:16:41 PM AEDT	Offnormal	Unacked	Floor1_Return_Temp	Building1_AlarmClass	255	High Temp
🔔	09-Oct-19 2:31:02 PM AEDT	Offnormal	Unacked	Building1_FCU2_1_Filter_Alarm	Building1_AlarmClass	255	Alarm
🔔	09-Oct-19 2:37:33 PM AEDT	Normal	Unacked	Building1_FCU2_2_Filter_Alarm	Building1_AlarmClass	255	Back to Normal
🔔	09-Oct-19 2:37:33 PM AEDT	Normal	Unacked	Building1_FCU2_3_Filter_Alarm	Building1_AlarmClass	255	Back to Normal

- Histories and trends

   o   Types of histories

   o   Setting up history extensions

   o   Viewing data and graphs

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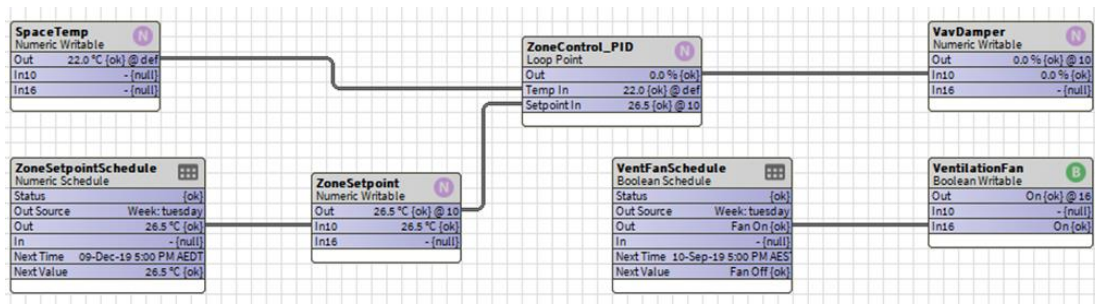02 9212 6577
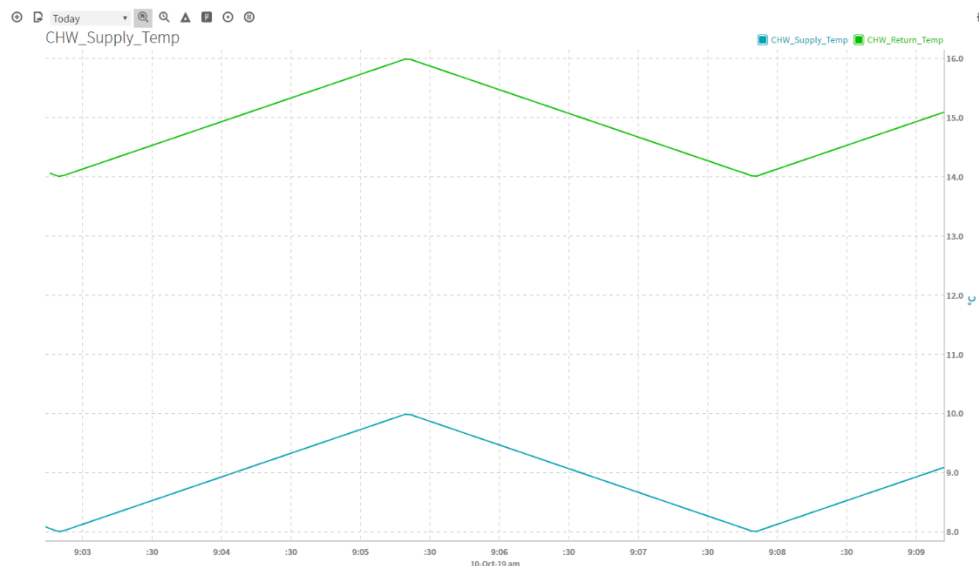
Day 2

- Graphics
    - How graphics are built in Niagara
    - Graphics libraries
    - Responsive and relative graphics
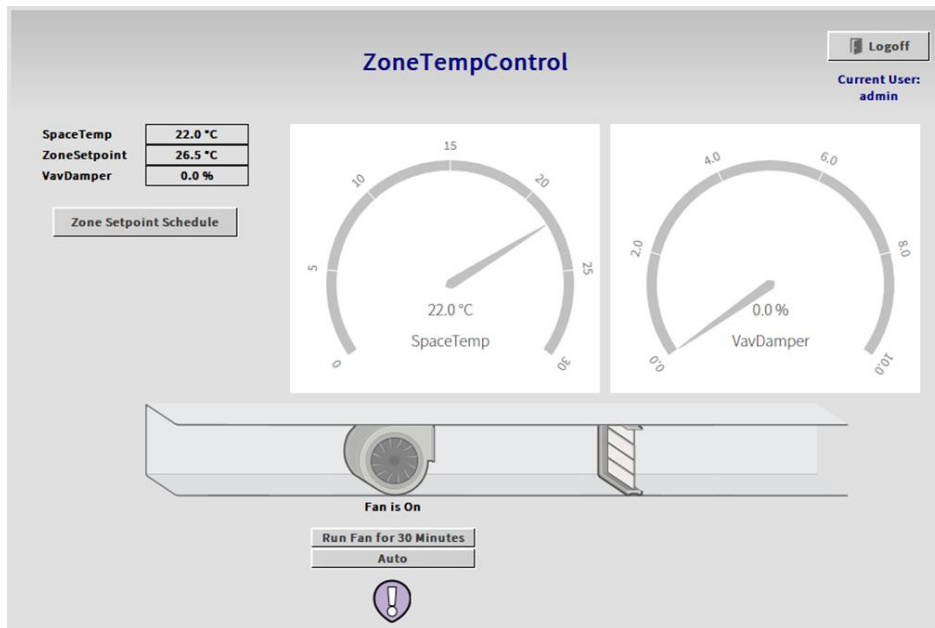
- More complex control logic
    - Use of multiple logic components and more complex elements
    - Zone control logic

- Schedules
    - Types of schedules
    - Setting up weekly schedules
    - Handling of special events
    - Public holidays set up

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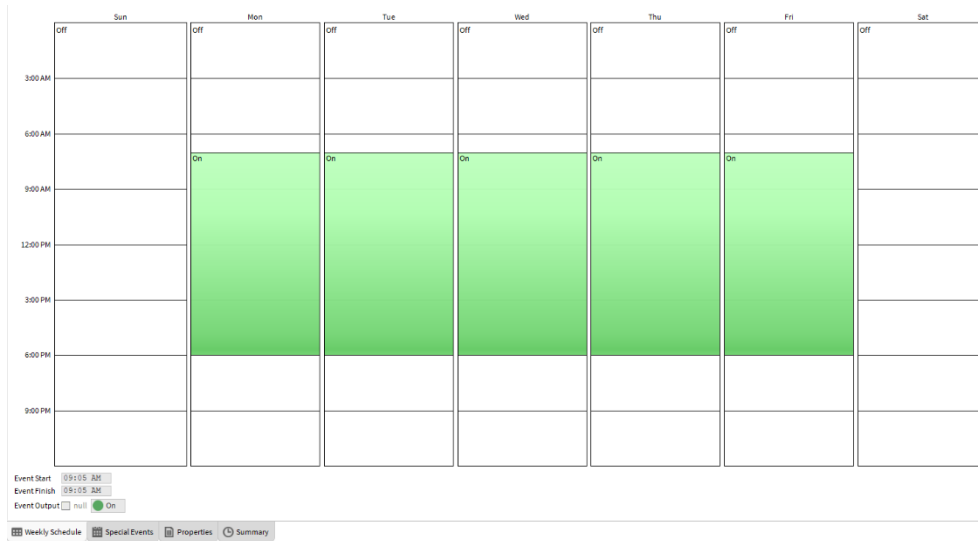
- BACnet integration
    - BACnet protocol introduction
    - Integration to a BACnet device
- Network architecture
    - Drivers in Niagara
    - How to build efficient networks?
- Program service
    - Adding multiple tags
    - Changing properties of multiple components
- Commissioning JACE
    - Setting up a JACE controller
    - Commissioning of a new JACE

Day 3

- Security and user administration
    - Station and platform security
    - SSL, TLS, HTTPS protocols
- User roles and categories
    - Permissions for groups of users
    - User management

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Name	Full Name	Enabled	Expiration	Roles	Allow Concurrent Sessions	Auto Logoff Settings	Network User
User		true	Never	admin	true	Auto Logoff Settings	false

Name		User
Full Name		
Enabled		☑ true
Expiration		⦿ Never Expires ○ Expires On 10-Oct-19 11 : 59 PM ▾
Roles		☑ admin
Allow Concurrent Sessions		☑ true
Auto Logoff Settings	Auto Logoff Enabled	☑ true
	Use Default Auto Logoff Period	☑ true
	Auto Logoff Period	0 h 15 m
Network User		☐ false
Prototype Name		
Language		
Authentication Scheme Name		DigestScheme ▾
Authenticator		Password Authenticator
Password		Password [ ] Confirm [ ]
Password Config		User Password Configuration

- Niagara network integration

  o Integration of Niagara devices

  o Set up of supervisor station

  o Routing alarms and histories to the supervisor

- Platform and station services in detail

  o Detailed description of platform components and station services

  o JACE - backup, restore, factory default, diagnostics

Day 4

- Review of learning and small project

  o Small project that gathers and reminds of all learned during 3 days

- Test project

  o Small project built by yourself