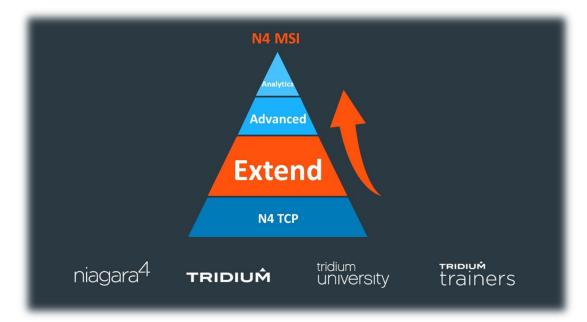


# **Tridium Niagara 4 Extend Certification**



# When/Where:

 May 5 - 9, 2025 – Virtual, instructor-led training Mon – Fri, 9.00 – 5:30 PM EST (New York)

# **Course Price:**

Course Pricing: \$2,900\* USD per student

All attendees to this course must be N4 TCP certified.

Spaces available – Contact us to book here

\*3% Convenance Charge will be added for Credit Card Payments











# What to bring:

#### Face-2-Face classes:

- Relatively Powerful Laptop with Network connection (must be hard-wired, not WIFI)
- Niagara workbench 4.14 installed and licensed (We can provide installation files and 30-day training license)
- Administration Rights to the Laptop (so you can access services, firewall ports, IP settings, users, etc.)
- Please advise if you have any special dietary requirements.
- Parking is not provided. Please check with the venue for availability and costs. •

#### Virtual Classes:

- Relatively Powerful Laptop with Internet Browser
- Microphone & speakers or headset & webcam.
- Additional second monitor or Tablet/iPad (optional)

# **Class Pre-requisites:**

Send your payment (Purchase Order, Credit Card, or E-Check) to Trueblue Controls LLC. Your class registration will not be confirmed until payment is received & accepted.

# Why thinktech?

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- We are the only Tridium Niagara 4 certified all-training partner in the world.
- We limit all our virtual certification classes to 8 students and face-2-face to 12 students to allow for the exceptional learning experience and providing the best student-to-trainer ratio.
- We are a dedicated training organization, specializing in technical disciplines and providing training courses in the areas of engineering, networking, Smart Buildings, IoT, digitalization, automation, cybersecurity, and related subjects.

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- We are serving educational, commercial, IT, data center, retail, financial industries, among others.
- Our team is available to provide local and tailored customer support.
- We offer attractive pricing and multiple training dates.



## Course description

Niagara 4 Extend Certification training course expands and enhances your knowledge of the most integrated system in the world.

- Designed for system integrators and engineers with experience and Niagara 4 TCP or Niagara 4 End User Proficient certification completed.
- The Intermediate Niagara 4 certification course after Niagara 4 TCP and prior to Niagara 4 Advanced TCP.
- The course is delivered over 5 days.
- All students are encouraged to work through series of labs designed to reinforce learning.
- All demonstrations are provided using real-life software environment.

The course ends with the practical project applying the knowledge of main Niagara concepts covered as part of the course; after passing the test, the attendee is awarded the Tridium Niagara 4 Extend Certified status. The certificate demonstrates the expertise to use Niagara 4 extended functionality.





# N4 Extend (5 days curriculum)

## Day 1 – Big Data Day

- Security •
  - Station security passphrase / passwords
  - Security service 0
- Smart tagging
  - Tag rules / auto-tagging. 0
  - Tagging new and existing stations 0
  - o nHaystack module and RESTful API
  - Haystack 4
  - Smart NEQL search 0
- Useful hierarchies
  - Smart menus
- Grouping data in right hierarchies
  - Granting access to relevant information only 0
- BQL
  - Syntax
  - How to use queries, BQL tools and tables effectively
- Program service
  - Advanced examples of use

## Day 2 - Smart Graphics Day

- Graphics deep dive
  - How to design user friendly graphics
  - BFORMAT explained.
  - Useful BFORMAT examples

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- Graphics relativisation
- Advanced Px include.
- Tabbed panes 0
- Dashboards  $\cap$

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Tag based graphics. 0











o SVG

## Day 3 - Integration Day

- Module signing
  - o Example of code signing SSL certificate creation
  - Module signing
  - Program signing
- Integration workshop
  - IOT protocols
  - o SNMP
  - MQTT in & out
  - JSON in & out
  - OPC in & out
  - HTTP Driver API in & out
  - SQL + Archive History Provider
  - Node-Red integration

## Day 4 – Data Access Day

- Templates
  - Creating and deploying a fully integrated template
  - Bulk deployment from Excel
- Brick Schema
  - o Setting up dictionary
  - Hierarchies and relations
  - API output
- Reports
  - o Manual reports
  - o Auto-reports generation
- History
  - User friendly history navigation

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- o Use of metadata
- Alarms









- o Correct alarm management and display
- Real example of e-mail alarm service set up.
- Niagara diagnostics
  - Event service
  - o SPY feature
  - Monitoring main system parameters

## Day 5 – Practice Day

- Test project
  - Small project built by yourself.







# **Qualifications & Exclusions**

- All course prerequisites MUST be completed prior to attending the classes.
- All transport, parking, and accommodation are excluded.

#### Booking and reservation policy

Training seats are reserved on the receipt of a full payment.

Refunds for changes or cancellations

If you are unable to make it to the training and would like to make a cancellation of the booking, or change to a later course date, the following refund structure applies:

Refunds are based on the following scale	
Period of notice given before course start date	Cancellation and change (expressed as a % of total training price)
Over 6 weeks	10%
29 – 42 days	50%
15 – 28 days	75%
0 – 14 days	100%
Any refund applicable is by method of payment	

## General

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Invoices shall be issued upon receipt of a payment.

- Full Payment is required prior to course commencement.
- No refund will be offered for students who do not attend or partially attend the course.
- No refund will be offered for students who do not achieve a passing grade for the course.
- Thinktech reserve the right to cancel the course at any time due to unforeseen circumstances that prevent the allocated trainer from attending the course or venue.









## Niagara 4 Extend Course – student feedback.

'Having completed the basic technical training for Tridium and as we are starting to work with their products more and more, I found this course invaluable in furthering my knowledge and proficiency in using the Niagara software.

Not only did we cover many of the more in-depth technical aspects of the framework, but we learned many techniques and correct practices that will greatly improve the efficiency and quality of my future work with the product.

In addition, the notes and Niagara project from the class will provide great reference material for future use.'

**Gregory Pallas** 

Field Service Engineer

Honeywell

honeywell.com

'The Extend course provided me with tools to deploy Niagara more intelligently in a manner that saves both effort and time. However, the course does much more than just building on the ideas explored during Thinktech's Niagara TCP certification – it goes further and introduces concepts that are rapidly becoming staples of modern commercial buildings, including the integration of the most common non-BMS hardware and software protocols.

This choice means that the course, overall, provides a much more wholistic training solution that isn't readily available anywhere else. '

James Hamilton

**Project Engineer** 

OptiComm

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opticomm.net.au









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'I wanted to say thank you for Hosting the Extend course last week I enjoyed it immensely. I found the course challenging! We are not currently using Tridium on a daily basis (Although we have projects forthcoming) so the level the course was set at was just right, I believe the advanced course would have been too difficult for me at my current level. I found the Histories and Hierarchies to be the most challenging, it's a part of the N4 I'll need to practice most. The Various Networks we ran through was interesting and will be of use going forward – The JSON part was highly informative.

think**tec** 

The course was very well paced and structured, I found the graphical aspects to be the most relevant for my current level and planned works, especially the template section, overall a very well presented and run course, I hope to continue with the N4 courses as my competency increases and look forward to the next one (whenever that may be)'

**Paul Barnes** 

Sr. Field Service Technician

Honeywell

Honeywell.com

#### Pre-course correspondents and material.

Excellent. I was kept up to date about the course commencing with contact emails.

The joining email for the remote connection and live online meeting was clear, concise and the systems worked perfectly throughout the course.

#### Course Content.

Extensive. Not only touched on most areas required for BMS/HVAC, it paid attention to the smaller details within that topic.

The additional Labs to complete in our own time were excellent add-ons.

#### Course delivery.

Structure and speed were excellent. It was challenging enough to really make me pay attention but was personal enough so as not to lose interest or concentration. Greg's knowledge is fantastic, and any question posed was answered extremely well.

#### Final Exam.

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The most trying BMS course exam I have taken. Not only does it allow you to show what you have learned, it encourages you to learn while doing it as the questions are posed to assist with further thinking. It is not a repetition of the weeks course. The





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structure of the questions differs to the weeks' structure, so it is not a copy and repeat exercise.

This has been the best BMS course I have attended, and I cannot speak highly enough of Greg's delivery, knowledge, and ability to translate difficult material into understandable sections.

Roberto Viganego

BMS Engineer

**BEMS UK** 

bems-ltd.co.uk

'The N4 Extend training I felt was a good step up from the TCP training in regard to difficulty, information and technicality, and is what I personally needed to feel more confident with Niagara systems and to have the confidence to "have a go" a bit more on the system.

The information and labs that we run through I felt were relevant to my experience and others and was delivered in a similar format to the TCP training which made it feel familiar and easily approachable.

Regarding the difficulty, I felt that it was a perfectly balanced as there is a lot of information to take in on some challenging areas, but it always seemed like you could complete them with a bit of thought and work.

The course felt like it was being run through for years like the TCP and other courses provide and you wouldn't know that it was a new course just created.

Jack Rossington

Technician

A1 Cooling

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a1cooling.com.au

*'I found the training very valuable. I have learned a lot of new things. Moreover, it clarified for me some mysteries, like Bformat & BQL syntax and structure.* 

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I was looking for training just between the TCP and N4 Advanced. That is because I don't need right now all the advanced topics of N4 Advanced, and TCP was an introduction. I like to attend training that I'll be able to apply all what I have learned.

I highly recommend this training.'

Khaled Mohamed

Senior Control Systems Engineer

Airvision

airvision.com.au

"Thank you for your guidance and this incredible course. "

**Project Engineer** 

**Evolv Building Technologies** 

evolvbt.com.au

"I would also like to thank you - an awesome course - very informative!!

I must admit I do have brain drain from information overload - but great to have the resources also to refresh my memory and look at later and start adding some of this to our projects."

**Controls Manager** 

**Building Automation Controls** 

bacontrols.com.au

A huge thank you to Greg Bergel for delivering an excellent Niagara4 Extend Course. The training was incredibly informative, providing valuable insights into Niagara's features that will directly enhance the way we manage our day-to-day operations.

The course has given us the tools and confidence to optimise our workflows as we take on the next level of master systems integration. Making our bulding control





systems more efficient and effective. It's great to see how Niagara's extended capabilities can be leveraged to improve processes.

Really appreciate the effort and expertise from Greg looking forward to applying these skills and exploring even more possibilities!

Director

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andorsystems.co.uk

