

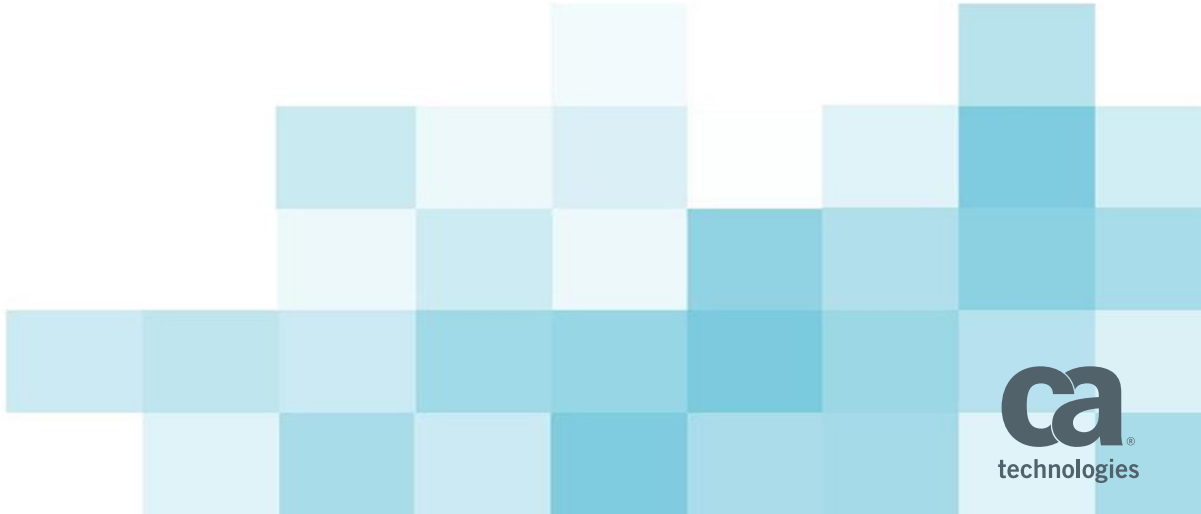
CA Gen

Overview and Roadmap

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V K, Vijaykumar (VK) – Product Owner, Manager Software Engineering

March 2017



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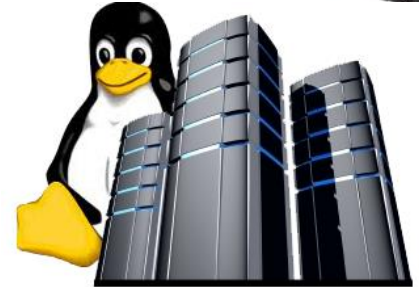
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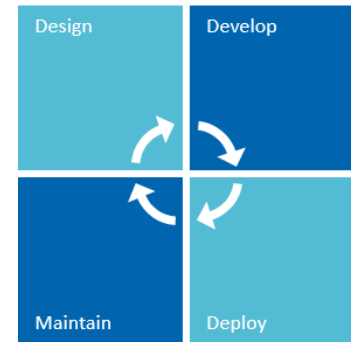
Mainframe (And Beyond)

- CA Gen is managed by the CA Mainframe Business Unit
- Customers use CA Gen on the Mainframe
- Customers use CA Gen without the Mainframe
- CA Gen modernizes applications to meet your needs for development and deployment



CA Gen: Enterprise Application Development

- CA Gen is an Enterprise Class Rapid Application Development Platform spanning Mobile to Mainframe
- CA Gen addresses all these challenges with a single, integrated development environment that allows development teams to create and maintain large-scale business applications for multiple platforms and multiple architectures. Using agile development methods, you can build new enterprise applications, design and implement reusable software components, web-enable applications, modernize legacy applications, and integrate systems from a single model using a single developer skill set. Be more reactive to change and lower your software costs, because with CA Gen, design changes are made in a model, not in the code.



Visit with Reno on YouTube for a fun 5 minute overview of CA Gen
Link: <https://www.youtube.com/watch?v=q-aNB7sTThA>

Use this video to explain what you do to your Spouse and Children

Did you know when...



- ...someone travels by train in Switzerland
- ...goods and services are taxed in Canada
- ...a letter is mailed in the United Kingdom
- ...you are pulled over for speeding in the State of Missouri
- ...a package is express delivered to all parts of the world
- ...you use your frequent flier miles from many major airlines
- ...you use an ATM machine in many countries
- ...criminal records are accessed in the US
- ...child support payments are processed
- ...taxes are calculated and collected in some countries
- ...health claims are processed in California
- ...you are a prisoner in certain states
- ...you buy pension insurance in Sweden
- ...you view your phone bill in many countries
- ...you apply for a banking loan in parts of Europe
- ...supermarkets place orders for goods in northern Europe
- ...school loans are processed in several countries

CA Gen is Legendary

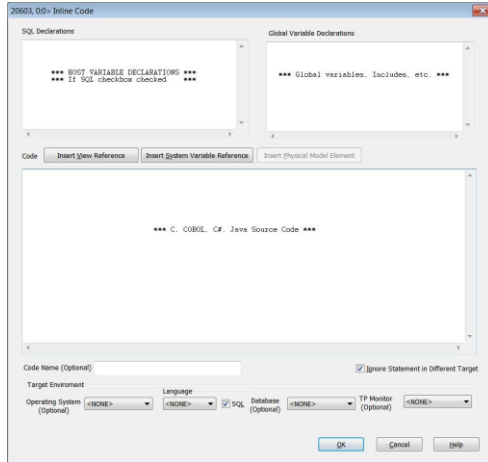


...They are using a CA Gen Application

Inline Code Statement – Arrived in Release 8.5

Allows you to insert and use native 3GL code or SQL statements

Inline Code Statement



PAIN

- Coding, compiling, and linking External Action Blocks (EAB) is cumbersome
- External code must be maintained separately from CA Gen development environment

SOLUTION

- New Action Diagram statement that provides the ability to add free-form source code and/or SQL that can reference and pass data between the hand-written code and CA Gen views

BENEFIT

- Write native 3GL code not supported by the CA Gen Action Diagram Language
- Write SQL statements not supported by the CA Gen Action Diagram Language
- Hand-written code is saved in the model/encyclopedias

See it on YouTube: <https://www.youtube.com/watch?v=kVIHBmKMC3c>

Inline Code Statement - Sample

```
RANDOM_NUMBER
IMPORTS: ...
EXPORTS: ...
LOCALS: ...
ENTITY ACTIONS:

NOTE *****
  If this call is to seed the random number
  *****
  IF seed_ief_supplied flag IS EQUAL TO "Y"

  NOTE *****
    Use current timestamp to create a 9 digit seed value
    *****
  SET seed_value ief_supplied count TO (microsecond(CURRENT_TIMESTAMP) * 1000) + (second(CURRENT_TIME) * 100) + minute(CURRENT_TIME)

  NOTE *****
    COBOL: Seed the random number generator
    *****

  INLINE CODE Language: COBOL
    COMPUTE ##SEED_RESULT.IEF_SUPPLIED.COUNT## = FUNCTION RANDOM(##SEED_VALUE.IEF_SUPPLIED.COUNT##)

  NOTE *****
    C: Seed the random number generator
    *****

  INLINE CODE Language: C
    srand(##SEED_VALUE.IEF_SUPPLIED.COUNT##);

  ELSE

  NOTE *****
    COBOL: Return a random number between the values of MIN and MAX
    *****

  INLINE CODE Language: COBOL
    COMPUTE ##OUT.IEF_SUPPLIED.COUNT## = (FUNCTION RANDOM * ##MAX.IEF_SUPPLIED.COUNT##) + ##MIN.IEF_SUPPLIED.COUNT##

  NOTE *****
    C: Return a random number between the values of MIN and MAX
    *****

  INLINE CODE Language: C
    ##OUT.IEF_SUPPLIED.COUNT## = rand() * ##MAX.IEF_SUPPLIED.COUNT## + ##MIN.IEF_SUPPLIED.COUNT##;
```

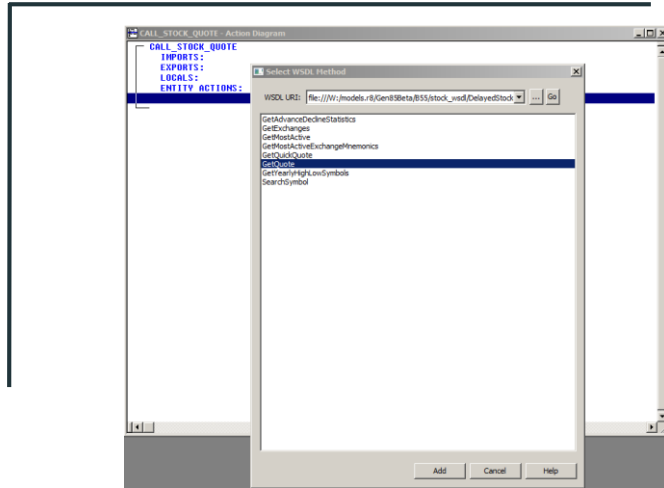
COBOL

C

Web Services Consumption– Arrived in Release 8.5

Allows you to call SOAP web services much like calling an External Action Block

Call External Web Service



PAIN

- Calling web services requires External Action Block (EAB)
- Coding, compiling, and linking EABs is cumbersome
- External code must be maintained separately from CA Gen development environment

SOLUTION

- New Action Diagram statement that provides the ability to call SOAP web services much like calling an EAB
- Parses the WSDL to determine methods
- Selecting a method allows you to match Action Diagram views to the selected methods parameters

BENEFIT

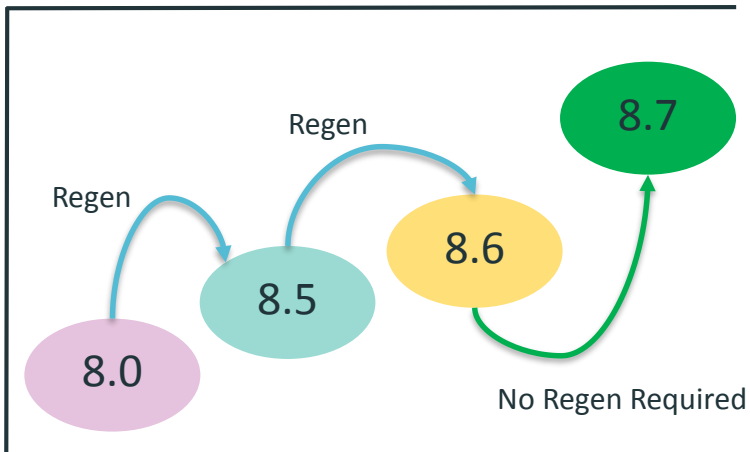
- Makes it easy to integrate and/or consume functionality from other systems
- Integrate with Modern API Enabled Applications
- Language Independence for Common Components

See it on YouTube: <https://www.youtube.com/watch?v=wuBd2v6jfyQ>

Distributed Applications Easier to Upgrade – Release 8.6

Allow applications to be upgraded by installing only the latest CA Gen distributed runtimes

Easier Upgrades



PAIN

- Upgrading to the latest CA Gen release previously meant regenerating and retesting their applications
- Retesting could be a very time consuming effort

SOLUTION

- Allow applications to be upgraded by installing only the latest CA Gen distributed runtimes so that applications do not need to be regenerated or relinked
- Eliminate the need for customers to upgrade their GUI applications all at once

BENEFIT

- Customers will now be able to upgrade simply by replacing the CA Gen runtimes
- Only regenerate and retest applications when making a business change

Free CA Gen – Release 8.6

Free Limited Edition for Training and Education

Train New CA Gen Engineers



PAIN

- Learning about new CA Gen Releases requires a full download and install
- Training New CA Gen Developers is expensive as they need a full Commercial License
- Installing CA Gen in Training Rooms expensive

SOLUTION

- A new Free Version of CA Gen is available on the CA Gen EDGE User Community
- This new version can be installed anywhere without licensing costs
- Installs on Windows PC

BENEFIT

- Experiment with new CA Gen features in a safe and secured environment without changing your primary development
- Training centers can now have access to CA Gen
- Removes Roadblock for anyone interested in learning CA Gen and improving their skills

[Versions](#) ▾ [Language](#) ▾[+ Technical Requirements](#)[+ Release Notes](#)[+ Installing](#)[+ Reference](#)[+ Developing](#)[+ Encyclopedia](#)[+ Implementation Toolset](#)[+ Distributed Processing](#)[+ Middleware](#)[+ Tutorial](#)[Product Accessibility Features](#)[Documentation Legal Notice](#)

CA Gen Documentation is
On Line and is a Living
Reference Guide.

Please Post Suggestions for
Improvement

[≡ Contents](#) | [Home](#)

Note: Click **Versions** to see documentation for other versions of CA Gen. If you cannot locate the version you need in this space, see our legacy bookshelf files on [CA Support Online](#).

Announcements & News

- [CA Gen 8.6 Incremental Release 1 is GA](#)
- Custom PDFs

Technical Requirements

Technical Requirements for CA Gen.

Release Notes

The new features, changes to existing features, known issues, and acknowledgements in CA Gen.

Installing

Installing CA Gen on all the supported platforms.

Reference

Best Practices, Messages, User Exits, Glossary, and API Encyclopedia references.

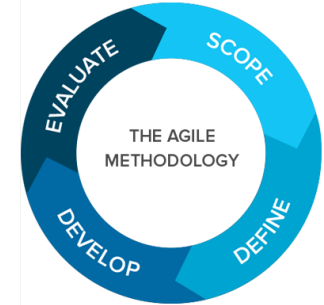
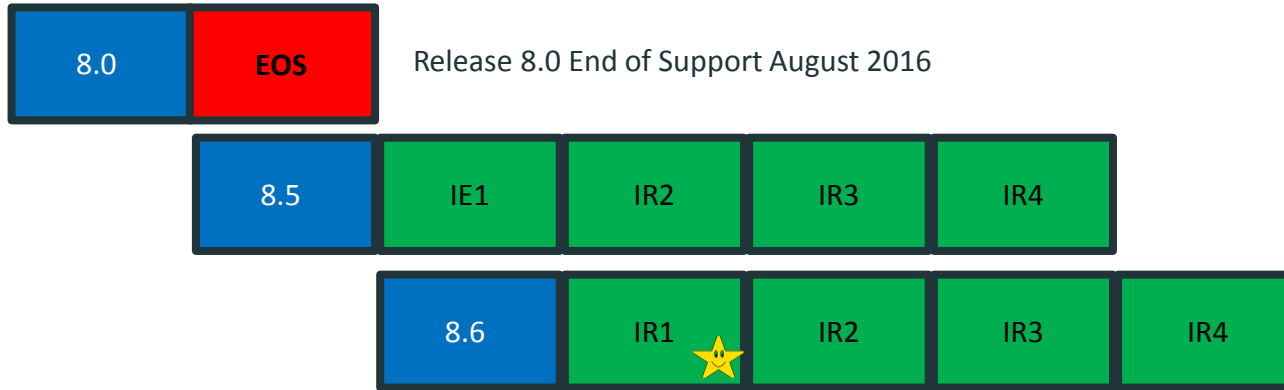
Developing

Stages of Analyzing, Designing, Constructing, Tracing, and Building a model.

Encyclopedia

Managing and working with the Host Encyclopedia and Client-Server Encyclopedia.

CA Gen Releases – Agile Development Process



Releases

CA Gen 8.5

Interim Enhancement 1
Incremental Release 2
Incremental Release 3
Incremental Release 4

May 2013
September 2014
December 2014
March 2015
June 2015

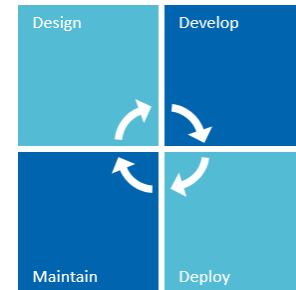
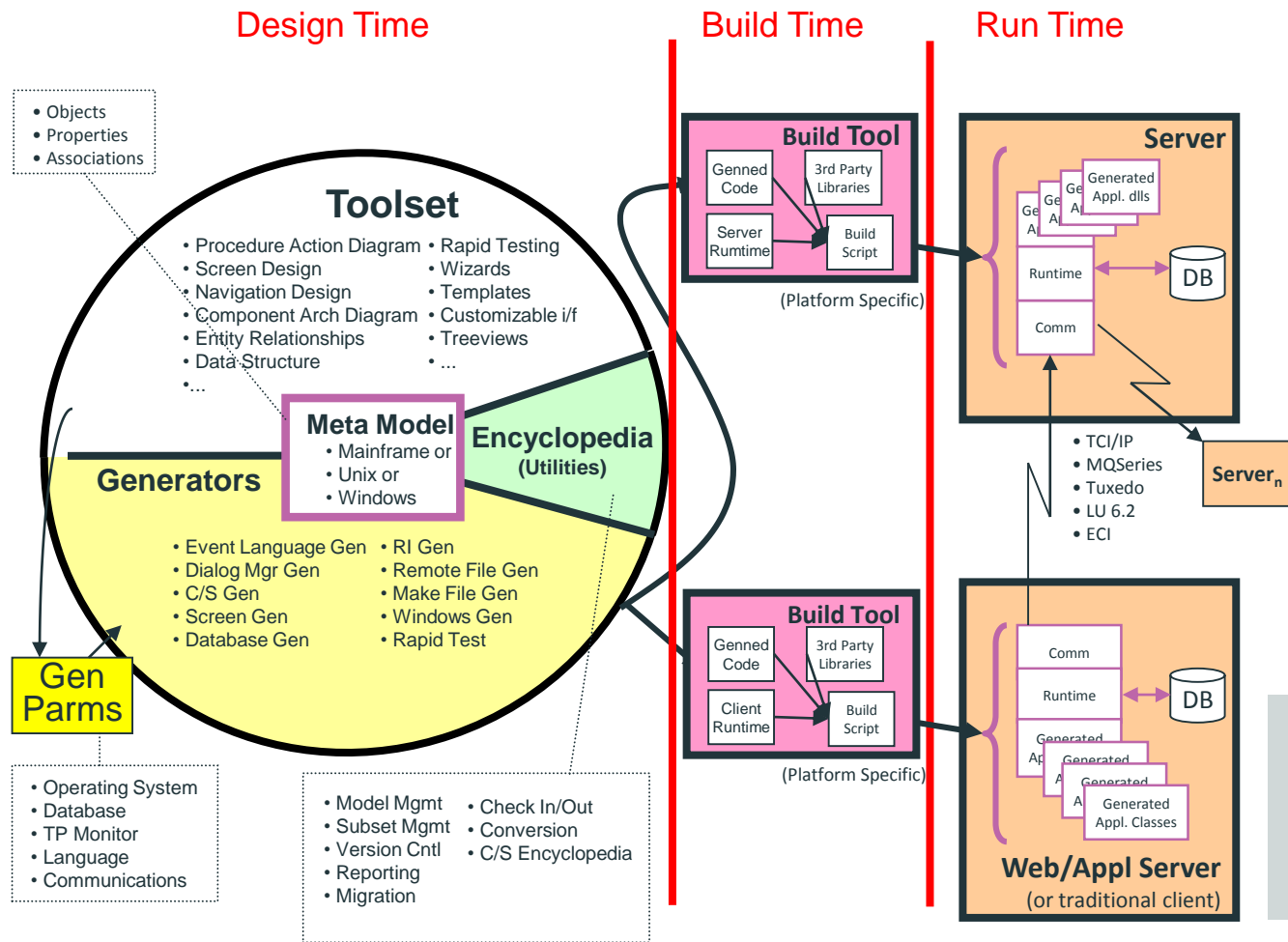
CA Gen 8.6

Incremental Release 1
Incremental Release 2

June 2016
January 2017
Planning in Process
(*Plan for 2017 Q3)

*Plans Change Quarterly as per our SAFe process

“Incremental Releases” continue to add functionality to the active release
Roll up of Fixes plus New Features



CA Gen has 80+ Options for CA and Partners to extend and support your business to drive modern applications

Roadmap: CA Gen

Timeline as of March 2017

	Delivered	Planned	Under Consideration
Product/ Releases	CA Gen 8.5 <ul style="list-style-type: none"> Increased CFB Limit from 32K to 16MB BLOB Support (Distributed) Support 64-bit Servers DB2 Database Partitioning SOAP Middleware Inline Code Web Services Consumption (C, C#, Java) Publish CA Gen Web Services to CA API Gateway HP NonStop SQL/MX Support 	CA Gen 8.6 IR2 <ul style="list-style-type: none"> Windows Edge Browser Support SSL/TLS Security Encryption for Communications Windows .NET 4.x Support Certification: IMS 14 (Will be announced before IR2) Replacement Tab Control in CA Gen for GUI Allow SSL web services (SSL handshake) to be called from Gen action diagrams for C# and Java Languages Performance and Large Scale Stress Testing (IMS and Batch Focus) IR3 and IR4 Research Work 	CA Gen 8.x (Ideas) <ul style="list-style-type: none"> Display statement numbers in the action diagram Allow action diagrams to be implemented as stored procedures Use a local group for IN clause PERFORM Local action Web Services Consumption (COBOL) Allow SSL web services (Authentication) to be called from CA Gen action diagrams
Marquee Features/ Business Value	CA Gen 8.6 <ul style="list-style-type: none"> Making searching lists in CA Gen easier Ease-of-Upgrade for Distributed Runtimes (C Clients, Java, C#, Unix Servers) Free Version of CA Gen 8.6 Certifications (Visual Studio 2015 support, Windows 10, Java 1.8 (update 60 or later), MS SQL Server 2014 SP1, and Oracle 12c for CSE) CA Gen 8.6 IR1 <ul style="list-style-type: none"> Add Date/Time to Timestamp function Ease-of-Upgrade for C Servers New Version for Solaris 10 (8.5 & 8.6) Certification: Windows 10 for Release 8.5 Certification: IBM COBOL 6.1 Performance and Large Scale Stress Testing (CICS Focus) Allow SSL web services (SSL handshake) to be called from Gen action diagrams for C Language 	CA Gen 8.6 IR3 (Conceptual) <ul style="list-style-type: none"> CA Endevor Integration for MF DevOps CA ALC Integration for MF DevOps REST Enablement Web Hooks for Automation Improved Java Generation for Multi Platform Certification: Windows Server 2016 	Key Themes <ul style="list-style-type: none"> Stay current Improve the Developer Experience Listen to the customer Improve Security Improve the ability to train new CA Gen Developers

Help us help you drive innovation in your business

Agile Development

Take the opportunity to influence our product development.
Help ensure that we deliver is what you need and want.



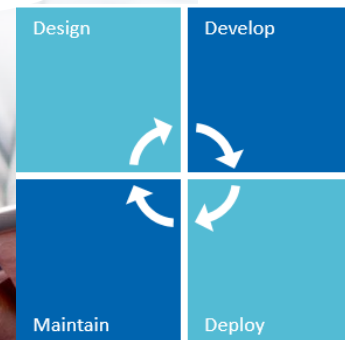
Influencing Our Roadmap

CA Communities Ideation

- Submit your ideas on communities.ca.com
- Vote & comment on ideas that are important to you
- CA Product Management reviews ideas and updates status as they move through the lifecycle
- “Currently Planned” idea status indicates inclusion in Agile Backlog or Product Roadmap

Customer Validation

- Register to participate in:
 - Live Demos/End-of-Sprint Reviews
 - Private - Members Only - Online Community
 - Pre-Release Onsite Testing and Support (Beta)
 - Upgrade Support from SWAT Team
- How to register:
<https://validate.ca.com>



Links: <https://communities.ca.com/welcome> (CA Gen Edge Community) <https://validate.ca.com/home.html> (CA Gen Group)

CA Gen r8.5 Learning Paths

Take charge of your path to success. Select a path based on your role, follow the suggested learning in the order we recommend, and also choose from common elective courses which suit your specific role. Where applicable, take advantage of accreditation exams focused on courses, and certification exams focused on bodies of knowledge.

Accreditation
Exam

Certification
Exam

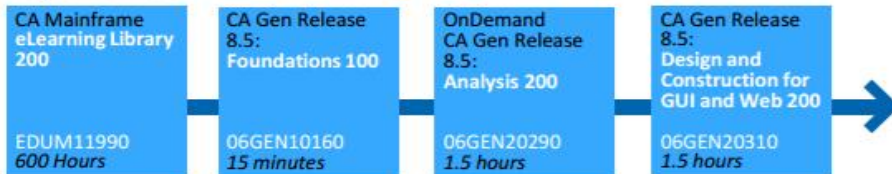
Instructor Led
In-class
or Virtual

Web-based
Self-paced

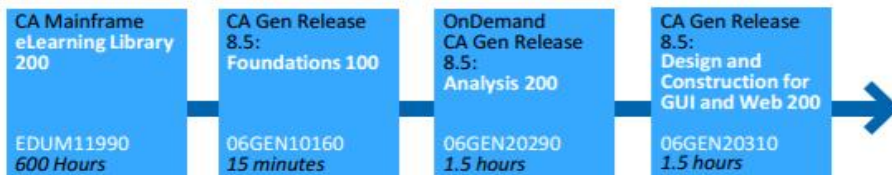
Dynamic Lab
Self-paced

Click on the boxes to see additional course/exam information in the CA Education Portal

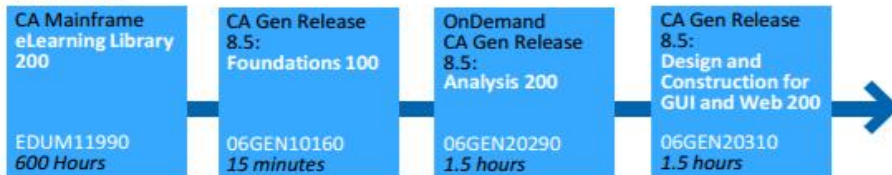
Implementer



Administrator



End User



New CA Gen Training and Education is in Process. Watch the User Community for Release Announcements

Should we create CA Gen Certification Exams?

Certification
Exam

IT Central Needs Your CA Gen Reviews

Please
Help and
Post a
Review

CA Gen
is #1
with 3
Reviews

IT Central Station
Unbiased reviews from the tech community

TOPICS ? ASK WRITE SIGN IN Search

ca technologies **CA Gen**
★★★★☆ 3 Reviews
Mainframe Application Development

280 Followers
+ Follow
Add To My Skills
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[Overview](#) | [Reviews](#) | [Deep Dive](#) | [Alternatives](#)

What is CA Gen?
CA Gen provides a single, integrated development environment that can help your teams create and maintain large-scale business applications for multiple platforms. This streamlined environment can help reduce manual labor and speed migration time while ensuring the future relevance of existing environments and applications.

SAMPLE CUSTOMERS
Global bank

CA Gen Reviews
★★★★☆ 4.3 out of 5 stars (3)

#1 RANKED
MAINFRAME APPLICATION DEVELOPMENT
IT Central Station

<https://www.itcentralstation.com/products/ca-gen>



For more information please visit ca.com/gen

Questions?



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