

Cloud Developer Toolkit (CDT) Training

Topics

Prerequisite Skills for CDT Training

CDT eLearning Curriculum

Finding the CDT Training in iLearn

Finding the CDT Website and the Lab Exercises

The Cloud Evangelists Program

Cloud Developer Toolkit Certification

Additional Resources

Recommended* Prerequisite Skills for CDT Training

- **Developers are expected to be competent in the below platforms and tools which are NOT covered in the CDT Training Program.**
 - Java
 - JSE and JEE including JDBC and JMS (excluding EJBs which are not supported)
 - XML
 - Eclipse
 - Tomcat (v6)
 - Clear Case
 - One of the below skills depending on the developer's role
 - GUI Concepts
 - RDBMS (Oracle)
 - Stored Procedures
 - REST
 - JUnit
 - SOA (Services Oriented Architecture) concepts

** The CDT Training course in iLearn is open to the entire organization. Validation of prerequisite skills is not required to take the training.*

Finding Training Resources

CDT eLearning Curriculum

*30+ hour self paced program - 50% hands on exercises and quizzes.
Available in SSC's Learning Management System iLearn in 2 Modules.*

Cloud Developer Toolkit Foundations

- Overview
- Introduction to the CDT
- SOA Concepts
- SOA Myths
- SOA Understanding Services
- Service Design & Development
- Cloud Concepts
- Dispelling Cloud Myths
- Cloud Roadmap
- 10 Development Standards {**Directives #1-10**}

Advanced CDT Development

- Designing an Application
- Security
- Services
- Interfaces
- Database
- Background Cloud
- Process and Governance
- Testing and Compliance
- Version Control and Release Management
- Capstone

Example Labs

- Install the CDT & Create your first CDT application.
- Using eSF for entitlement enforcement {**Directive #1**}
- Create a user interface {**Directive #3**}
- Handling business logic in the cloud {**Directive #6**}

***Lab Exercises are hosted in
PDF files on the CDT Website
on the SSC Intranet***

Finding the CDT Training in iLearn

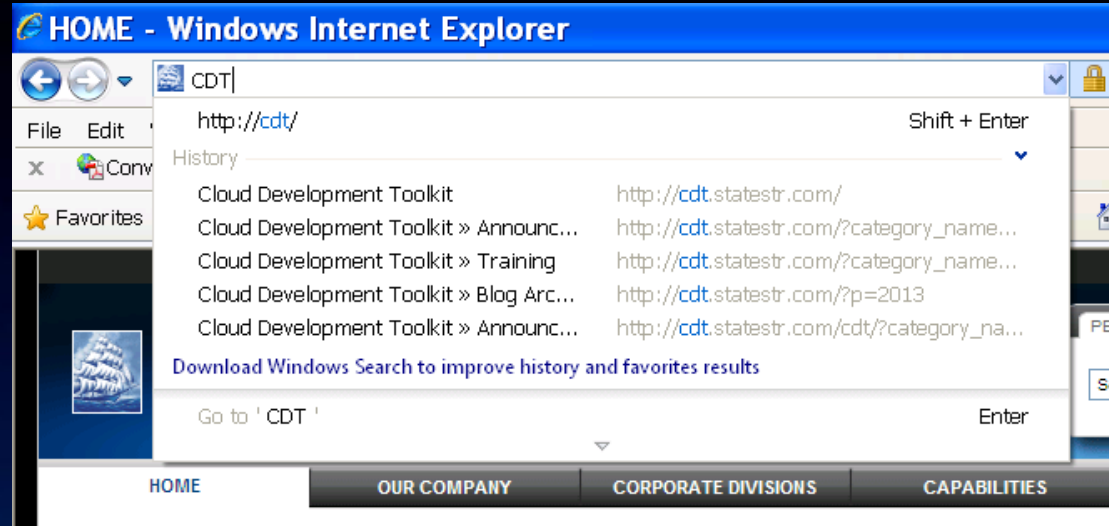
- Log into Employee Self Service
<https://psh.statestr.com/psp/HRPRD/EMPLOYEE/HRMS/h/?tab=DEFAULT>
- In the menu box on the left, click on “iLearn” which will open another screen with a menu box.
- In the menu box on the left click on “Self Service”. A box will open in the center of the screen with various folders.
- Click on “Basic Search” link in lower left corner hand corner.
- Enter “CDT” in the search text box and click on “Search Activities”.
- A listing of available Cloud Related courses will be displayed including Cloud Developer Toolkit Foundations & Advanced Cloud Developer Toolkit.
- Click on the “Enroll” link in the right hand corner of the course.
- On the next screen is an expanded description of the session.
- Click on the “Submit Enrollment” Button.
- On the next screen you will see the message “You have successfully enrolled in [the Course you Selected] This change in status will be updated on the All Learning page.” You can launch the course from the bottom of the page or from your All Learning page.

Notes on CDT eLearning Quizzes & Bookmarking

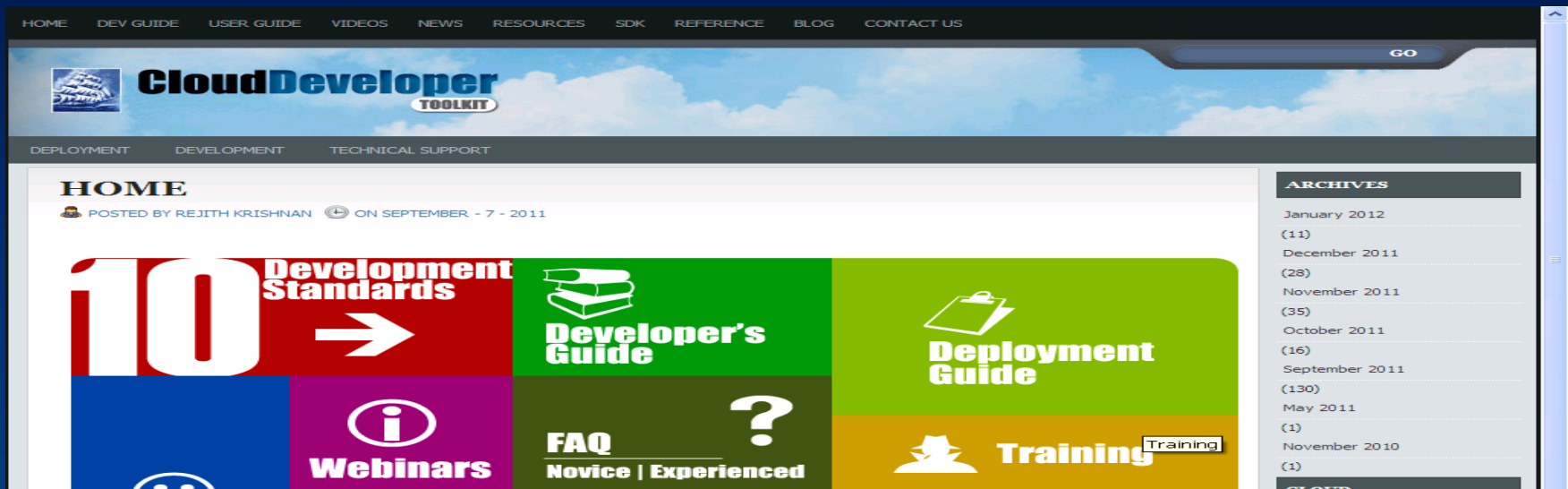
- The CDT Foundational & Advanced iLearn courses are each comprised of several self contained modules, once you have completed a module you will need to return to the Activity Progress in iLearn to launch the next module in the course.
- Each module within the CDT Foundational & Advanced courses ends with a quiz.
- The quizzes are only to help you test your knowledge. Don't worry if you don't "pass" the quiz. You don't need to go back and answer the questions again.
- There is a known problem in iLearn that sometimes prevents the Bookmarking feature from working properly. It is best to complete a individual module in one sitting. You still will be able to find where you left off in a chapter by fast forwarding.

Finding the CDT Website and the Lab Exercises

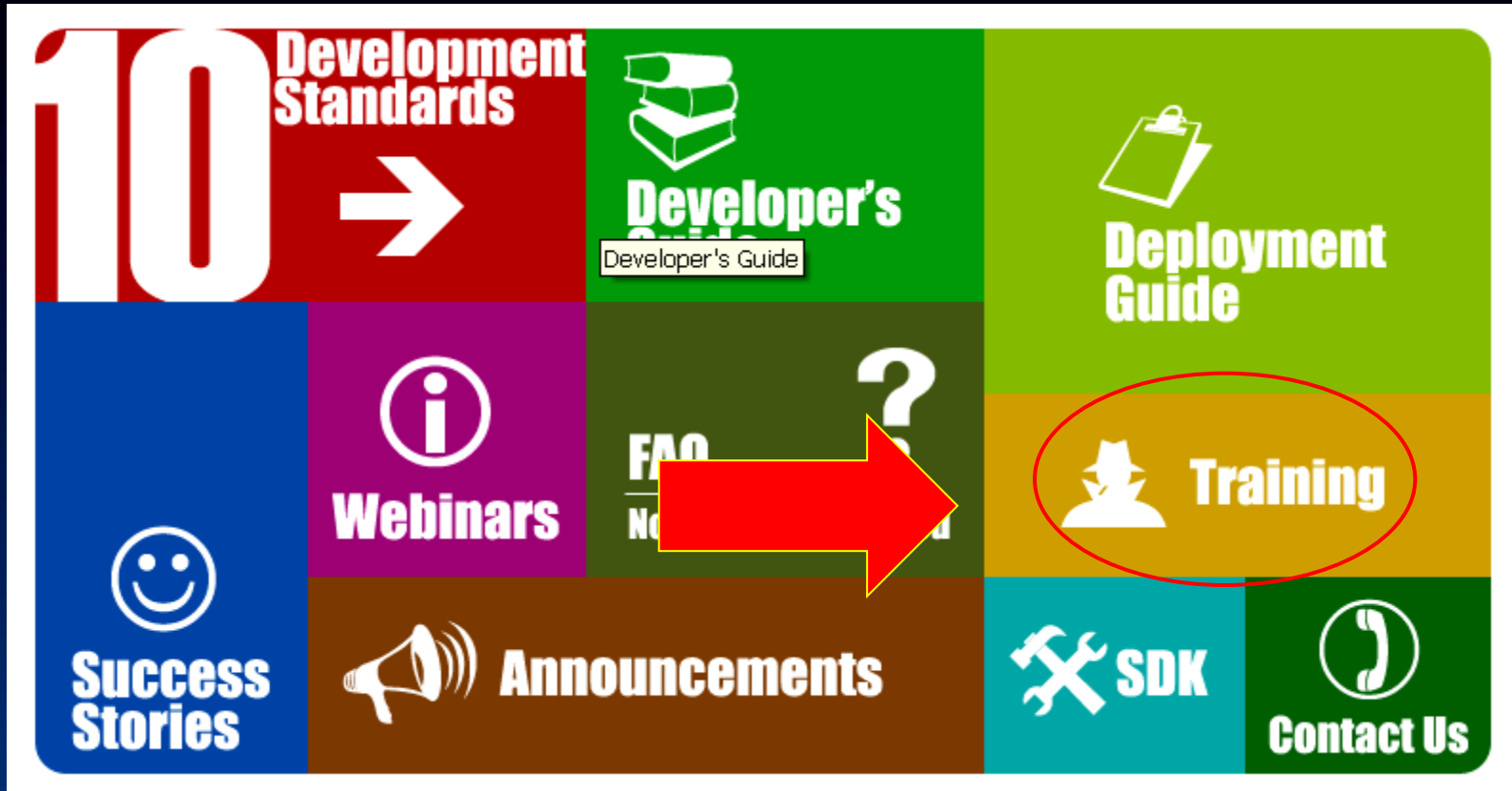
Type “CDT” into the
Address Bar of
Your Internet
Browser




You'll be Taken to the CDT Website Home Page



Click on the Training Icon from the Home page





The Labs will be in the First Article Post on the Training page



DEPLOYMENT DEVELOPMENT TECHNICAL SUPPORT

Navigation: Weblog / Blog article: Download CDT Training Files

Download CDT Training Files

 POSTED BY PAUL ANDERSON  ON NOVEMBER - 8 - 2011

Purpose of This Article

This article contains PDF files from the online training. Labs are included and supporting files for these labs are also included. You can download these files.

Intended Audience

Members of the Cloud Community, from beginners to experienced developers, who are currently or considering developing custom applications, or migrating applications to the Cloud, using the CDT framework.

CDT Sample App

To download the sample app, click [CDT sample app](#).

For more information on using the sample app, go to [Run the Sample App for CDT 0.13](#).

Introduction to SOA, Cloud, CDT, and Web Services

- [SOA Concepts](#)
- [SOA Myths](#)
- [Cloud Concepts](#)
- [Cloud Myths](#)
- [Cloud Roadmap](#)
- [Overview of CDT](#)
- [Development Standards](#)
- [Understanding Services](#)
- [Service Design and Development](#)
- [Labs:](#)

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CLOUD

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[Service Registry](#)

LINKS

[Office of Architecture](#)

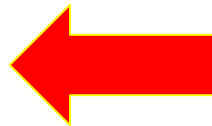
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Introduction to SOA, Cloud, CDT, and Web Services

- [SOA Concepts](#)
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- [Cloud Myths](#)
- [Cloud Roadmap](#)
- [Overview of CDT](#)
- [Development Standards](#)
- [Understanding Services](#)
- [Service Design and Development](#)
- [Labs:](#)
 - [Cloud Roadmap](#)
 - [Installing the CDT](#)
 - [Creating the First App](#)



Advanced Cloud Developer Toolkit Labs

http://cdt.statestr.com/?category_name=training

Cloud Developer Toolkit Foundations Labs

Advanced

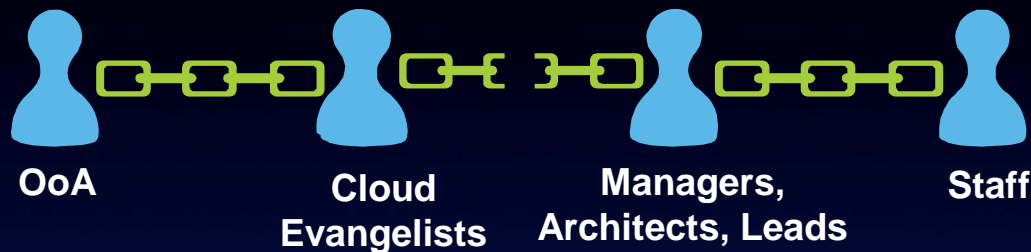
- [Designing an Application](#)
- [Security](#)
- [Services](#)
- [Interfaces](#)
- [Database](#)
- [Background Cloud](#)

Labs

- [Create a Service](#)
 - [Lab Files for Create a Service](#)
- [Create a User Interface](#)
 - [Lab Files for Create a User Interface](#)
- [Use a Database](#)
 - [Lab Files for Use a Database](#)
- [Configure a Background Cloud App](#)
 - [Lab Files for Configure a Background Cloud App](#)



Cloud Evangelists Program



- Act as Divisional CDT SME & Key liaison to OoA.
- Actively participate in and build the Cloud Community.
- Do design & code reviews (or train people to do it.)
- Participate heavily in app selection and prioritization for Cloud Deployment.
- Participate in interactions with Hangzhou & Vendor Partners.

The Cloud Evangelists must become “The Face” of State Street Cloud Development to their organization.

- The model for the distribution of Cloud Development knowledge and expertise is a “Community of Practice”.
(“Groups... who share a concern, or a passion about a topic...who deepen their knowledge and expertise by interacting on an ongoing basis” -Wenger et al, 2002)
- Example: A Service Community – a social network around the Service Registry for developers & consumers who can “like”, “comment” and start discussions around existing and proposed services.

The Cloud Evangelist Role

- **Total of 20 Evangelists initially. They...**
 - Were selected by their division head with the endorsement of the Office of Architecture.
 - Participate in an extensive training program.
 - And..
- ***Possess the technical acumen to understand the State Street Cloud Development environment, the communication skills to explain and teach it, and the leadership ability to be its enthusiastic advocate.***

Cloud Evangelists

Igor Grapp	AIS	Rajibul Chowdhury	ITS
John Pinto	AIS	Steve Dispirito	ITS
Manish Parikh	CSO	Edmond J. (Ted) Donlan	ITS
Lakshminarayanan Venkatesan	CSO	Jennifer Fan	ITS
Sanjeev Kumar	GMT	Praveen Jetty	ITS
Sanjay Singh	GMT	Robb Jones	ITS
Kartikesh Herur	GTS	Rolfe Lofmark	ITS
Puneet Khanna	GTS	Syed Zubeir	ITS
Sunil Kulkarni	GTS	Ron Dagostino	SSgA
Kushal Baduamanda	ITS	Todd McFarland	SSgA

Contact Information at http://cdt.statestr.com/?page_id=4181

Cloud Developer Toolkit Certification

- Web Age Solutions and the Office of Architecture have created an assessment to validate developers readiness to develop in the SSC Cloud.
- This Certification assessment will have a total of **40 Questions** focused on validating conceptual understanding:
 - 10 on Directives.
 - 10 on Terminology.
 - 10 on Methodology and Concepts.
 - 10 on the API.
- A passing grade is 75% or above.
- You may take the assessment as many times as you like.
- The Governance around the CDT Assessment has yet to be determined (January 2012).

Taking the CDT Training before taking the CDT Assessment is not required.

Cloud Developer Toolkit Certification

- All questions, including coding questions will be multiple-choice.

Example: The State Street Cloud supports a small set of fixed standards that are well known and easy to implement. These include...

- ___a. XML using SOAP, HTTP, JEE enterprise applications running on JBoss
- ___b. Web Services, IIOP, Web 2.0 applications running on Tomcat
- ___c. RESTful services, WAP, HTTP, JAVA web applications running on JBoss.
- ___d. XML using REST model, HTTPS, JAVA web applications running on Tomcat.

The goal is to ensure developers will be successful in the SSC Cloud Environment.

Additional Resources

- SSC Intranet
 - CDT Website – Type “CDT”
 - Office of Architecture Website – Type “OOA”
- iLearn
 - ***“Introduction to Service Oriented Architecture (SOA)”*** 7 Hour eLearning Course available in iLearn. Search on “(SOA)”

If you have questions or require more information on CDT & SOA Training in iLearn, please e-mail [Philip Beaudoin](mailto:Philip.Beaudoin@statestreet.com).

Introduction to Service Oriented Architecture (SOA)

7 hour self paced program from Web Age Solutions.

Outline

- Case for Change
- SOA Fundamentals
- SOA Case study
- Enterprise Service Bus (ESB) and SOA Patterns
- SOA Benefits and Advantages

Learning Objectives

- After completing this course, you should be able to:
- Describe the fundamental concepts and business advantages of SOA
- Explain the SOA runtime elements
- Describe the concept of an Enterprise Service Bus
- Understand the role of Business Process Execution Language (BPEL) in SOA
- Identify features of typical SOA Framework Products
- Patterns mapping to SOA

Launching “Introduction to Service Oriented Architecture” in iLearn

- Log into Employee Self Service (<https://psh.statestr.com/psp/HRPRD/EMPLOYEE/HRMS/h/?tab=DEFAULT>)
- In the menu box on the left click on “iLearn” which will open another screen with a menu box.
- In the menu box on the left click on “Self Service”. A box will open in the center of the screen with various folders.
- Click on “Search Catalog”.
- Enter “(SOA)” in the search text box and click on “Search Activities”.
- You will see a listing for “Introduction to Service Oriented Architecture (SOA)”.
- Click on the “Enroll” link in the right hand corner.
- On the next screen is an expanded description of the session.
- Click on the “Submit Enrollment” Button.
- You will see the message “You have successfully enrolled in Introduction to Service Oriented Architecture (SOA) Training. This change in status will be updated on the All Learning page.” You can launch the course from the bottom of the page or from your All Learning page.