

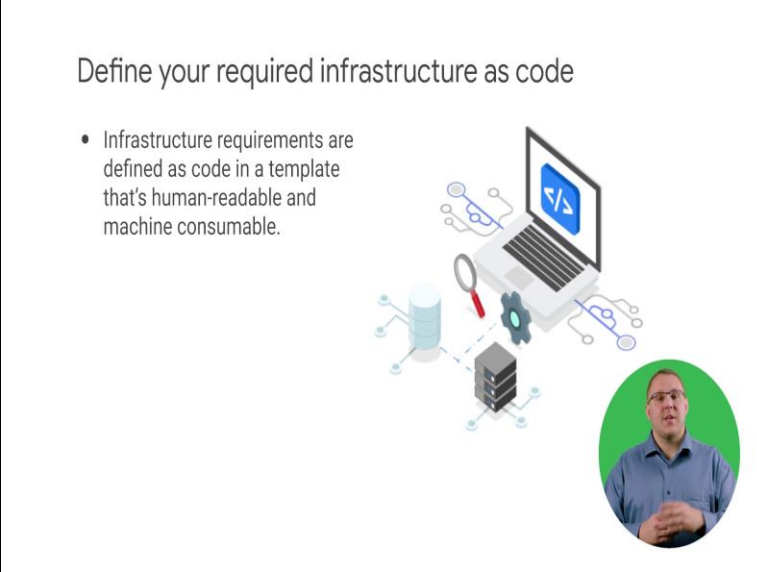
Google Cloud Computing Foundation Course
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Lecture-63
Introduction to IaC

(Refer Slide Time: 00:06)

Define your required infrastructure as code

- Infrastructure requirements are defined as code in a template that's human-readable and machine consumable.

The slide features a white background with a black border. At the top, the text 'Define your required infrastructure as code' is centered. Below it, a single bullet point states: 'Infrastructure requirements are defined as code in a template that's human-readable and machine consumable.' To the right of the text is an illustration consisting of a laptop with a code editor on its screen, a server rack, a magnifying glass, and various icons representing infrastructure components like a database and gears. In the bottom right corner of the illustration area, there is a circular portrait of a man with glasses, wearing a blue shirt, against a green background.

Let us start with the first topic where we discussed the concept of infrastructure as code. As the name implies infrastructure is code or IaC is taking what a required infrastructure needs to look like and defining that as code. You capture the code in a template file that is both human readable and machine consumable. Infrastructure as code tools allow you to provision entire infrastructure stacks from templates.

Rather than having to use a web console or run commands manually to build all the parts of the system the template is used to automatically build the infrastructure that same template enables resources to be automatically updated or deleted as required. Because templates are treated as code they can be stored in repositories tracked using version control systems and shared with other users and teammates.

Templates can also be used for disaster recovery if for any reason the infrastructure needs to be rebuilt those templates can be used to automatically recover.