SmarterRoads.org
Transportation Cloud Data Portal Security

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Cloud Data Portal Security

System Data Security – two types of data

- Static Data
  - Currently from secure VDOT sources
- Dynamic Data
  - Roadside units (RSU): firewall protection, using dedicated closed loop fiber
  - Virginia Connected Corridor (VCC) portal: Virginia Tech provided
  - SmarterRoads portal: hosted at Amazon Web Services (AWS). They are certified secure cloud service provider
  - MIST Gateway: firewall protection and separated from MIST source system

System Access Security

- User agreement – access not granted if user doesn't agree
- User-id and Password – unique to each user

Dealing with unintended consequences

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Identify Hacking or User Agreement Violation

- Human detection
- Multiple attempts lockout
- Performance Monitoring to detect unusual activity or load

Determine Level of Response needed (When /How / Who)

- One or more selected group of users to be blocked, or
- Select data feed(s) to be suspended, or
- Entire portal access temporarily restricted

Email support team, with instructions

- Iteris (systems contractor) support team email, for quick action
- 10-15 minutes to make necessary corrections as determined from above

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VDOT must also be prepared to deal with unintended consequences

- While data may be downloaded normally VDOT must consider:
  - What if the use of data somehow compromises operational safety?
  - What if the data were used to create negative perception of VDOT?
- In the future, additional data sets may be added, some might come from non-VDOT sources
  - What additional safe guards should we consider?
  - How do we assess potential threats?
  - How does VDOT deal with the perception that VDOT owns 3rd party data?
- Cyber Security and business practices will continue to evolve as data portal usage increases

VDOT will continue to evaluate, monitor, and implement procedures to assure these issues are addressed.

END