

# BTS-2.10 - Wireless 802.11 Networks

Administrative Rules Adopted by Bureaus Pursuant to Rule Making Authority (ARB)

Policy category: Information Security

Policy number: BTS-2.10

## WIRELESS 802.11 NETWORKS

Administrative Rule Adopted by Office of Management and Finance Pursuant to Rule-Making Authority

ARB-BTS-2.10

#### HISTORY

Authorized by Ordinance No. 179999 passed by Council March 15, 2006 and effective April 14, 2006.

Revised rule adopted by Chief Administrative Officer of Office of Management and Finance and filed for inclusion in PPD April 17, 2012.

Revised rule adopted by Chief Technology Officer November 15, 2013.

Revised rule adopted by the Chief Administrative Officer of the Office of Management and Finance and filed for inclusion in PPD October 29, 2015.

This rule was reviewed as part of a periodic review and remains unchanged. July 13, 2017.

This rule was reviewed as part of a periodic review. April 30, 2018.

Revised by Chief Technology Officer October 10, 2018.

This rule was reviewed as part of a periodic review. September 1, 2021.

# **Related documents**

BTS-2.10 Wireless 802.11 Networks Administrative Rule 105.29 KB

Search Code, Charter, Policy

## Keywords

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## WIRELESS 802.11 NETWORKS

Administrative Rule Adopted by Office of Management and Finance Pursuant to Rule-Making Authority ARC-BTS-2.10

## Purpose

This policy prohibits access to City Trusted Networks via unsecured wireless communication mechanisms. Only wireless systems that meet the criteria of this policy and City Information Security Standards and Administrative Rules or those Authorized Users which have been granted an exclusive waiver by the Chief Technology Officer (CTO) or the Senior Information Security Officer (SISO) are approved for connectivity to the City's Trusted Networks.

This policy covers all 802.11 wireless information communication devices, whether City managed or personally owned (e.g., computers, laptops, notebooks, smartphones, tablet computers, etc.) which connect to any of the City's networks, or authorized Internet-based Service Provider hosted services, technology resources, or City managed or connected systems.

## Administrative Rule

**Register Network Infrastructure Wireless Devices:** All network infrastructure wireless devices (Access Points, Base Stations and Network Interface Cards) connected to City networks must be approved, registered, installed and maintained by the Bureau of Technology Services (BTS).

**Encryption and Authentication:** To connect to City Trusted Networks, all networking devices with wireless capabilities must utilize a City approved configuration which prohibits all unauthenticated and unencrypted traffic. To comply with this policy, wireless implementations must maintain point-to-point hardware encryption of at least AES-128-bits. All implementations must support a hardware address (MAC address) or BTS approved unique device identifier that can be registered and tracked. All wireless implementations must support and employ strong user authentication which checks against a BTS approved and managed RADIUS database or Microsoft Active Directory or AZURE and support 802.1x authentication.

**Setting the SSID:** All wireless access points must have their Service Set ID configured so that it does not contain the default authentication credentials supplied by the manufacturer.

**Penetration Tests and Audits**: Wireless Access Points and Base Stations are subject to periodic penetration tests and audits. Unauthorized Wireless Access Points are subject to immediate network disconnection and equipment confiscation.

Default wireless manufacturer or vendor settings must be changed, including but not limited to default wireless encryption keys, passwords and SNMP community strings.

# References

Please refer to the following BTS resources for term definitions, acronyms, and BTS standards used within BTS Admin Rules:

- 1) BTS Technology Definitions https://www.portlandoregon.gov/citycode/article/114449
- 2) (BTS) Technology Standards Directory (and Acronyms) -https://www.portlandoregon.gov/bts/article/44978
- 3) City of Portland Information Security Standards

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This rule was reviewed as part of a periodic review and remains unchanged. July 13, 2017.

This rule was reviewed as part of a periodic review. April 30, 2018.

This rule was reviewed and revised as part of a periodic review. September 2, 2019.

This rule was reviewed and revised as part of a periodic review. June 30, 2020.

This rule was reviewed as part of a periodic review. September 1, 2021.