

## Cyber Warfare Capabilities Analysis: Brazil

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### Assesment

Current capabilities are moderate but growing. Changes in strategy have been implemented to strengthen Brazil's cyber capabilities. The army is being restructured and trained to be an informationitized force. Cybernetics was identified as a key strategic point in its national defense

### Background

Brazil is an emerging market country. This is characterized by fast economic growth, increased foreign investment, and international political clout. Brazil has the 6<sup>th</sup> largest economy in the world and is trying to find its place as a global power. As such it is going through many growing pains, as it becomes a world leader. Some of these pains include trying to protect its own cyber infrastructure as it tries to leverage its cyber power as an effective military tool.



### Operations & Tactics

#### CCOMGEX

Support the army through the vectors of Communications and Electronic Warfare.

Signals Intelligence

Research and Education

Communications and Logistics

#### PandaLabs

Hired in 2010 in an alliance with the Army's Cyber-Warfare Communication Center

Provide protection for 37,500 military command computers

Train operational agents in cyber security, forensics, and warfare

Counter 100s of ongoing daily cyber attacks



### Strategy

In 2008 the Ministry of Defense created a new national defense strategy that was implemented in 2010. This strategy listed cybernetics as 1 of 3 major strategic sectors. To accomplish their strategic goals the following was put in place:

Acquisition and development of NEW TECHNOLOGY

Restructuring of the Armed Services

Creation of the Center for Communications and Electronic Warfare Army (CCOMGEX)

National defense and security activities are highly interrelated and involve the economy, politics, environment, national productivity potential, science and technology.

### Facts

Brazil is ranked 10<sup>th</sup> on the Cyber Power Index

Lacks a defined cyber strategy

Lacks trained workforce

Poor legal & regulatory frame work framework

Most of the "anti-cybercrime" laws are from the 1940s

73 million computers, 50% are used for banking

95% of malware in Brazil targets the banking industry

Lost over \$1 billion last year