

# Keeping Mission Critical Facilities up and running in the midst of the Covid 19 crisis. Server Rooms and Data Centers up and running - Express Computer

By Express Computer

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**By Dinesh Gupta, Director, Bry-Air**

Never has the need for Servers and IT infrastructures to be hundred percent up and running felt more by everyone working than in the last few weeks. Servers have become a lifeline for every company and their employees during this lockdown.

Large Data Centers have always been recognized as mission critical facilities as they are the backbones of banks, telecom, large firms and consultancies, etc. However, what has come into focus

in the last few weeks are server rooms of every big and small company, as employees have been working from home and thus, the “well-being” of IT infrastructure during this COVID-19 pandemic is utmost important. And, as we have all been hearing in the last couple of weeks, work from home may be the new norm in days to come even after the lockdown is lifted.

So, what happens when the Data Centers shut down or stops working for some reason? Our lives will come to a standstill and there is likely to be chaos all around. Thus, maintenance and upkeep of Data Centers, either at company owned sites, co-location sites or server rooms to ensure 100% uptime and reduce downtime to minimal is the goal of all IT Heads. The uptime classifications of data centers as prevalent is Tier I, Tier 2, Tier 3 and Tier 4 specifying the acceptable uptime going up to 99.99%.

### **Corrosion – a reason of failure for servers**

There are many aspects which can cause a server to fail, some recognized and as a result, precautions taken and some causes not really ‘known or understood, and thus, no precaution taken. It is about this ‘unknown’ cause... the impurity in the air, the corrosive gases present in the ambient air, we will focus today. There are gases like H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>2</sub>, NH<sub>3</sub>, Cl<sub>2</sub> etc. ever present in the air, more so in the swanky offices which have come up on landfills, e.g. Malad (Mind Space) in Mumbai, or next to sewage drain, areas in Noida, or simply near a high traffic zone, almost every pocket in the major towns.

These gases and other corrosive impurities are usually “sucked” in through the aircon systems, as we all know, data centers need to be kept cool. Once inside the server rooms and data centers, these gases cause micro corrosion in the PCBs resulting the PCBs to fail and thus, cause downtime. The best way to handle this massive problem is to ensure that the corrosive gases are filtered out by using Gas phase filtration systems.

It is best to check the level of corrosivity in the air in the server rooms and types of gases present with an Atmospheric Corrosivity Monitor and then use Data Center Gas Phase filtration systems to filter out these corrosive gases before they damage micro circuitry of PCBs. Easy to implement but the right and timely diagnosis is important. Just like many essentials taken into consideration while designing, managing, upgrading a server room or data center, it is important to have Gas Phase Filtration Systems to be on the list of essentials to avoid downtime nightmare and replacement costs.

Protecting the Datacom equipment and servers from any potential contamination threat is a vital step in ensuring the good health and continued viability of your Datacom equipment and servers. The ultimate solution to corrosion lies in Gas Filtration, which involves passing the contaminant-laden air stream through a gas adsorbent impregnated with neutralizing chemicals placed in a properly designed housing. This situation of corrosion in server rooms or data centers can be minimised or avoided if the center is equipped with a gas filtration system.

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