

# **Keys to Achieving IBM Power System (i) High Availability in Manufacturing**

Whether attempting to grow one's business or protect one's market share, focusing on the "high availability" of your operating system uptime can mean the success or failure of your company's ambitions. "High availability" is the standard method used to measure an industrial/commercial computer system's capacity for operational potential uptime versus its unplanned downtime. It is not a measure of volume, but is based instead on attempted usage. A single factory, efficiently run, might have a much higher availability than a larger chain of factories with outdated software. In the manufacturing world of 2017, bigger is not always better. Adaptability and productivity are how the day is won.

None of this can be done without the right tools, and IBM i on Power8 microprocessor servers are the one of the most effective duos on the market. With access to an array of programs and an industry of experts, businesses in every sector of manufacturing can increase their high availability and reap its rewards.

Here are some quick tips to increase your high availability:

## **1) Reaching the Heights of Five Nines**

It is commonly held that in order to compete and produce on an industrial scale, any large business needs to have a consistent high availability of at least 90%. But even this is low. Few manufacturers would find it acceptable for their their data servers and operational systems to only 9 out of the 10 times times. Most push for higher, and as of 2017, the highest availability for systems currently regarded as obtainable is 99.999%- known in IT-speak as "Five Nines." This requires some of the most cutting edge equipment and expertise available. In the event that a company has brought on a managed hosting server to handle their IT needs, a guarantee of a minimum level of high availability is often stipulated in the contract.

## **2) When Down Is Up(time)**

The great adversary of high availability is "downtime," whether planned or otherwise. Any time that operating systems, machinery, or data servers of a manufacturer are running inefficiently or not at all, the company is losing money. In a 2012 white paper by the International Data Corporation, 55% of surveyed companies stated that even a single hour of unscheduled downtime would constitute a "severe impact" or "disaster" for their business' financial stability and future.

As such, it may be counter-intuitive to say that one of the most important steps in maintaining

high availability is to make sure that you get a proper amount of system downtime. “Planned downtime” is the only time when new program versions, security patches, and compatibility updates can only be uploaded and processed. A system with too much uninterrupted uptime is often regarded as potentially instability or an outright security risk. During such times, a backup server would (ideally) come into play and become the principal server.

### **3) More Heads Are Better Than One**

“Managed server hosting” are firms that can store and monitor your data and system information, providing a highly cost-effective way of safeguarding you from unplanned downtime. Their usage of “Mimix for the HA” complements IBM i’s capacities, amplifying its capabilities for data replication and providing greater protection against factors that would disrupt a switch between these servers. They can also provide you with a variety of IBM i consulting services, provide a deeper picture of forecasts, supply chains, industry trends, and precise coordination between multiple factory locations. Managed server hosts can provide a level of control and oversight previously unimagined, allowing you to maximize productivity and high availability to its utmost. The consultants can also provide in-house services for company by conducting trainings, providing staff, and assessing an organization’s IT needs. They can lay down an entirely new foundation for improved high availability in a company.

### **The Bottom Line**

Achieving high availability is perhaps the most important step in achieving a thriving manufacturing business. With the right skills and expertise, IBM i on Power8 can negotiate the nuances of server mechanics and operational logistics to make this goal a reality. With the help of managed hosting servers and outside consultants, increased high availability is all but certain.