

Chapter 7

Conclusion and Future Scope for Extension of Research Work

7.1 Conclusion

The town data centre it's getting basic services and functionality to the current data centre to create a proposed design data centre for real-time requirements for small and medium industries or other users. The proposed town data center is a combination of getting references or upgrading design for past and present data center designs.

This proposed town data center is the future of ICT, and AI IoT is needed for local level Data Center for fast data analysis for users. This model generates, new technical employment and businesses for local level and small industries and people are indirectly connected to them.

The Town Data Center connected cable through direct end users. The user's data are securely stored in our data centre, with no routing on the internet. The users and town data center is directly collaborating no third party is connected. Town Data Center are also Backup store Cloud/Far from TDC. Layered two security with a secure site.

Tier 1 model so no need more IT Equipment like Server, Storage, Networking switches etc., also we are not using Internet Leased Line this model provides direct cable thorough connection to end user. Deployed on Center of Excellence so infrastructure cost is also down.

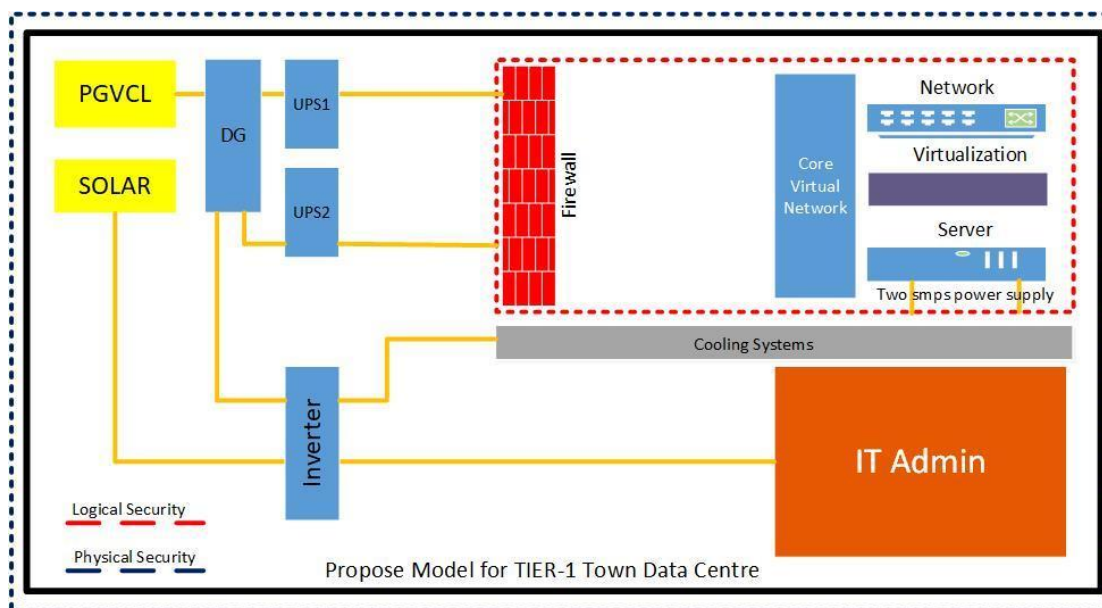


Figure 7.1: Abstract Diagram

This proposed model provides 24x7x365 day monitoring to Core level, Distribution level, and End-users Nodes and Connection. Whenever indicate a technical issue technical person direct contact and troubleshoots the issues same time. Or uses can rise the complaint the data centre, technical team troubleshoot.

The provisioning of power supply for each server is two SMPS and each SMPS are separate power source with dedicated Online UPS. And backend Diesel generator.

All users are connected directly Fiber-based and/or Wireless this is our Primary Connection end users, The Internet leased line is backup purpose.

Cloud Services are reliable when we use Online Applications for Publically uses, so when users are increased the server auto-scale up or down. The industry has limited users and when the users are fixed no need to require an auto-scale up or down the load is the same in 365 days. Cloud Service providers use SaaS online bases but Town Data Center also deployed the same concept and users manage on-demand services locally based.

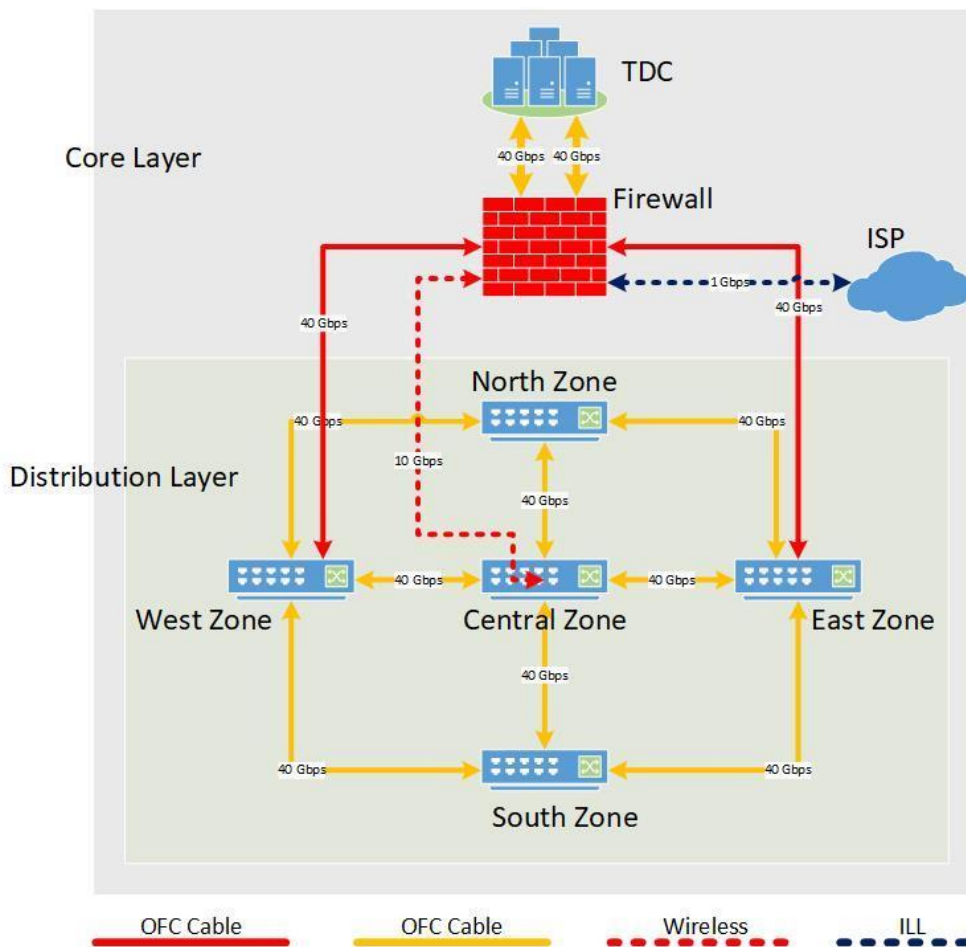


Figure 7.2: GLIA Distribution Network Diagram

Server room references are used for on-premises but it is modified to the nearest industries. Typical or enterprise data centre are given to Fibre or wireless connection. Cloud data center refers to online services subscribed by users. A hybrid is also a combination server room and cloud data center. So its common solution is a town data centre design. Edge data centre and micro are also similar to hybrid combination data centre but both functionalities are different when I combine the same functionality in the town data centre.

Choosing the right machine learning algorithm depends on several factors, including, but not limited to: data size, quality, and diversity, as well as what answers businesses want to derive from that data. Additional considerations include accuracy, training time, parameters, data points, and much more. Therefore, choosing the right algorithm is both a combination of business need, specifications, experimentation, and time available. Even the most experienced data scientists cannot tell you which algorithm will perform the best before experimenting with others.

Today and future technology are more advanced and also Ai enables 5G internet speed if rethink design data centre as per upcoming technology then the cost and services are reliable to current technology, small and medium industries are using cost-effective data centre services.

7.2 Future Enhancement

This Proposed Town data centre design is helpful globally, category wise data center deployment affect cost and services. Data center services are similar to telecommunication or google or any online requirements. Today or will be in the future the technology grove more today JIO is all over India providing telecommunication services as well as all over India his optical fibre cable is deployed. If JIO is synchronized data center connectivity end user through or over his telecom services. Also, JIO is today providing AIR Fibre to a home solution but the same technology using the data center connection is changing the data center concept.

The GTPL also provides optical fibre to the end user as a telecom GTPL collaborates with the Data Center facility and provides end-user data centre services on a fibre that also changes the data center.