

# Bareilly – Adapting Technology to Innovate

**Bareilly is a prominent city in the northern state of Uttar Pradesh spread across 6 tehsils, 15 development blocks and having a population of about 44 lakhs (as per the 2011 census). The city has been famous for various reasons right from days of Mahabharat as birth place of Draupadi to a very popular song in Indian Cinema. However, the present day Bareilly will be remembered as one of the first districts to adopt Information Technology and be one of the pioneers to have a thin-client based networked Collectorate.**



**KAMAL KUMAR SHARMA**  
District Informatics Officer  
NIC Bareilly  
[kamal.sharma.nic.in](mailto:kamal.sharma.nic.in)



**MANOJ KUMAR SHARMA**  
Senior Systems Analyst  
NIC Bareilly  
[mkr.sharma@nic.in](mailto:mkr.sharma@nic.in)

**D**ay-in and day-out, NIC team at Bareilly faced a daunting task of managing more than 40 desktops, located in different rooms around the Collectorate campus. The problems reported were more or less the same “my PC is not working”, “the network is not working”, “my backup was lost” etc. etc. On analyzing these problems it was found that majority of them were simple “virus problems” which resulted in network choking, data loss and unavailability of computers. A lot of precious time was wasted in removing these viruses, re-installing the systems and there was a tremendous pressure to save the important data as well.

NIC Bareilly and district administration led by the then district magistrate Sh. Ashish Goel IAS, studied various technologies to resolve the problem and finally decided to have a thin client based collectorate, which is based on the fundamental concept that instead of running all applications locally on PCs with associated challenges and costs, applications should run centrally and simply deliver screen updates and inputs to the clients. It was found that the thin client computing not only reduces the deploy-

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**Anshu Rohatgi**

ment cost by 40-50%, but also cuts down on requirement of support staff leading to higher utilization levels.

In thin client environment the data and software look and feel the same as on a PC for any user on the network. The data files are stored on the server which makes it easier for users to work from multiple locations. The thin clients only run the operating system software locally, and have no hard drives or floppy drives. However, they per-



**NIC Officials explaining Thin Client Concept to Sh. Majid Ali IAS & Commissioner and Sh. Ashish Goel, IAS & District Magistrate, Bareilly**

mits local printing, audio and serial device support, web browsing, terminal emulation and can combine local processing with network computing.

**Advantage of Thin Clients are** Reduced Capital Expenditure, Reduced Power, Consumption about 20% of normal PC, No repeated desktop configuration, No need to redesign and integrate e-mail architectures, Minimal chances of Data loss and Scope for introducing viruses is greatly reduced

After installing thin client system in Bareilly Collectorate the number of complaints has reduced considerably. Services are being delivered 24 by 7 and Internet has been extended to all the 40+ nodes in the Collectorate. The employees can now work on many online projects of the government and they can work from any thin client in the Collectorate. Still, thin client is not a one-size-fits-all solution. Users will generally not have access to USB and CD drives, nor will they be able to install applications. Server security and resilience is also very important and critical. As such proper planning, power backups etc is must to ensure server availability at all times. Adequate emphasis has to be given to data backup also as all the files are stored centrally.

Apart from this, NIC, Bareilly has been constantly providing support to the district administration in areas of office automation, scheme computerization, training, Internet & web services and in their endeavor to use IT to provide services to the citizens in a simple & friendly manner.

Many state and central government IT projects are being implemented across the district some of which include -

**Information KIOSK:** Information KIOSKs have been established at the Collectorate and Tehsil Sadar to facilitate the citizens to know the status of various schemes being implemented by the government and retrieve information related to land records, salaries, pensions etc.

**Single Window System:** Single window systems have been implemented in all the tehsils of the district which provide the citizens with caste, income, domicile certificates and other host of other services.

**National Rural Employment Gurantee Act:** Many workshops and training programs were organized at Bareilly for block staff, district level officials and data entry agency staff for smooth functioning of the project. Currently online data entry is going



District Administration officials working on Thin Client

on in all the blocks.

**State Wide Area Network:** Bareilly was one of the first few districts to connect all the tehsil & block PoPs (Point of Presence) under the UPSWAN project, that provides the basic functionality of network for the transactional aspects of e-Governance applications. In all there are 18 PoPs in Bareilly, one at district level, 6 at tehsil level and 11 at block level which are providing horizontal connectivity to field offices of various departments such as commercial tax, transport, passport, post and telegraph etc.

**Online Counselling:** With a view to ensure transparency in admission procedure in different Engineering Colleges affiliated to Uttar Pradesh Technical University, Lucknow and for the convenience of residents living in different parts of the state NIC conducts online counseling for admission to B.Tech, BBA, MBA, MCA B.Ed, Medical etc. courses offered by different Institutes across the state every year. Bareilly has been selected as one of the counseling centre for these admissions for both the off campus and online counseling.

### NIC BAREILLY IS ALSO PROVIDING SUPPORT TO

- Prerna: The property registration system implemented at sub registrars office.
- Treasury computerization connecting about 100 departments
- Bhulekh : technical support and

management of all the six tehsils computer centres issuing computerised Record of Right (RoR or Khatauni)

- Birth and Death Registration system at Nagar Nigam Bareilly
- Transport Computerisation at office of RTO
- Below Poverty Line: software developed & implemented at DRDA
- Right to Information. All the proactive disclosures of many departments have been put on the official website of district (<http://bareilly.nic.in>)

NIC Bareilly has been working in close association with the district administration to extend the IT enabled services across the district and influence the life of people living in far and remote areas using the tools provided by Information Technology. It's a commitment to the district administration that from now on Bareilly will be known more for its achievements in IT than anything else.

### For further information

#### KAMAL KUMAR SHARMA

District Informatics Officer  
National Informatics Centre  
District Informatics Centre  
DM Meeting Hall  
1st. Floor, Collectorate  
Bareilly- 243001  
Ph: 0581 - 2511337  
[upbar@nic.in](mailto:upbar@nic.in)