

$$P_{3\text{er}} = 1 - \left[ 1 - \prod_{i=1}^n P_{en} \right]^m$$

$$m = k + 1$$

$$T_{3\text{er}} = \frac{1}{\lambda_0} + \frac{1}{2\lambda_0} + \dots + \frac{1}{(k+1)\lambda_0} =$$

$$= \frac{1}{\lambda_0} \left( 1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{k+1} \right)$$

$$\lambda_{3\text{er}}(t) = \frac{\lambda_0 (k+1) \exp(-\lambda_0 t) [1 - \exp(-\lambda_0 t)]^k}{1 - [1 - \exp(-\lambda_0 t)]^{k+1}}$$

пасивне загальне резервування

$$P_{\text{роз}} = \prod_{k=1}^n [1 - (1 - P_{\text{сн}})^{k+1}]$$

$$T_{\text{роз}} = \frac{(n-1)!}{\lambda_0(k+1)} \left[ \frac{1}{k+1} - \left( \frac{1}{k+1} + 1 \right) \dots \right]$$

$$\times \left( \frac{n+1}{k+1} + n-1 \right)$$

Пасивне роздільне резервування

$$x_{\text{роз}} = \frac{\lambda (k+1) \lambda_0 \exp(-\lambda_0 t) [1 - \exp(-\lambda_0 t)]^k}{1 - [1 - \exp(-\lambda_0 t)]^{k+1}}$$

$$P_{\text{роз}} = \sum_{\eta=0}^{k+1-m} C_{k+1}^{\eta} P_{\text{роз}}^{k+1-\eta} \sum_{j=0}^{\eta} (-1)^j C_{\eta}^j P_j(t)$$

$$T_{\text{роз}} = \frac{1}{\lambda} \sum_{\eta=0}^{k+1-m} \frac{1}{m + \eta}$$

Ковзке резервування

$$P_{k+1}(t) = P_k(t) + \int_0^t P_{k+1}(t-\tau) f_k(\tau) d\tau$$

$$P_{k+1}(t) = \exp(-\lambda_0 t) \sum_{n=0}^k \frac{(\lambda_0 t)^n}{n!}$$

$$T = \frac{k+1}{\lambda_0}$$

активне ненавантажене резервування

$$P_{k+1}(t) = P_k(t) + \int_0^t P_{k+1}(\tau) P_{k+1}(t-\tau) P_k(\tau) d\tau$$

$$P_{k+1}(t) = P_k(t) + \frac{C_k}{k!} \exp(-\lambda t) \lambda$$

$$\lambda (1 - \exp[-\lambda_j t])^k$$

$$T = \frac{1}{\lambda} \sum_{j=0}^k \frac{1}{1+j} \frac{\lambda_j}{\lambda}$$

$$C_k = \prod_{j=0}^{k-1} \left( j + \frac{\lambda}{\lambda_j} \right)$$

полегшений резерв